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THE RELATION OF SURGICAL PATHOLOGY TO SURGICAL DIAGNOSIS.*

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It cannot be denied that surgical technique is far in advance of surgical diagnosis. In the great majority of instances the failure to cure is due, not to the fault of the operative procedure, but to the fact that the operative intervention has been instituted at too late a stage of the disease.

This fault is due to three factors:—(x), which we may call the period of latency of the disease, *i.e.*, the time during which the lesion has not attracted the attention of the host; (a), the period during which the patient delays before seeking the advice of the physician; (b), the time spent by the physician in coming to some conclusion in regard to treatment.

To shorten the period (x), the latent stage, is beyond our power, but fortunately but very few surgical diseases become incurable during this period.

Before attempting to shorten the second stage, (a), that is the time during which the patient waits, we should attempt to correct our own shortcomings.

Without much doubt the far better results of the earlier operative intervention will soon reach the public and shorten the third stage of the delay.

The paramount object of surgical diagnosis is to recognize a lesion in that stage in which operative interference will not only give the best chances of a permanent cure, but will accomplish a cure with the least danger to life, and mutilation of the individual.

The hope of future surgery lies, therefore, with the general practitioner. It is he who should be impressed by the undisputed fact, based upon the accumulated experience of careful records from large clinics, that permanent results depend most upon early, the very earliest possible, operative interference.

To shorten the period (b), during which time the physician delays, we should seek to instruct ourselves to be content with less positive symptoms. We must base our clinical diagnosis, not on a symptom complex which enforces delay, but on the symptoms present at the first examination. In a majority of instances a careful

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study of the clinical history and a painstaking examination will allow one to decide whether delay is justifiable.

It is unnecessary and dangerous to delay treatment for exact diagnosis; the question is, not what is the exact nature of the surgical disease, but, rather, is it, or is it not, a lesion which will allow delay.

For example, given a patient exhibiting symptoms pointing to some acute abdominal trouble, the question of importance to decide is not so much what the exact lesion is, but are there sufficient symptoms to indicate an immediate laparotomy. In many acute abdominal lesions a delay of even a few hours is fatal. A mistake in the locality of the incision which would compel a second opening is trifling as compared with the delay of an hour in order to be more positive in regard to the locality of the lesion. In gastric, duodenal and typhoid perforations, a decision must be made at once in order to save the life of the patient. It is unnecessary to mention the danger of delay in intestinal obstruction. Yet to recognize this lesion in an early stage, in which the chances of recovery are greatest, one must be content with fewer and less positive symptoms than have been considered in the past, and a new sign, a rise in the number of the leucocytes, has been found to be one of the most important aids. Delay in appendicitis in many instances means death or an abscess formation, which demands drainage. It is far more difficult to diagnose appendicitis in the proper stage for operative intervention, than to perform the operation. It is much easier to instruct students in the operative technique of appendectomy than to teach them the timely recognition of the lesion. Place a recent graduate in a large surgical clinic, and he will become an efficient operator long be-

fore he becomes an expert diagnostician.

To illustrate the importance of an earlier working diagnosis, I shall confine my remarks this evening chiefly to the diagnosis of tumors, and later further illustrate by a lantern slide demonstration on diseases of the breast and bone.

The records of a large surgical clinic are pathetic in regard to malignant tumors. Fortunately there is more than sufficient evidence to indicate that a malignant tumor in its early stages is a local disease. This fact should be impressed upon the laity and upon ourselves. As long as cancer and sarcoma are confined to the locality of their birth, they are curable. In addition, many cases of carcinoma are curable, even where metastasis has taken place to the neighboring lymphatic glands. Accumulated experience demonstrates that in the period (x), during which a tumor does not give sufficient evidence of itself to attract the attention of its host, the disease seldom becomes incurable.

The stage (a), due to the delay of the individual, unfortunately in many cases is fatal. But when we come to study the clinical histories with care, we are chagrined to find that the incurability of the lesion can be attributed just as often to the physician's procrastination as to the individual's ignorance or timidity.

A decision in regard to a tumor should be made at once. The terms "innocent" and "malignant," employed by Bland Sutton in his excellent text book on tumors, are most appropriate, and we can use them in formulating a law in regard to the treatment of tumors directly opposite to the almost universal law applicable in the trial of individuals accused of crime, namely, a tumor should be considered malignant until every means has been exhausted to demonstrate that it is innocent;

also in regard to tumors in contrast to the treatment of individuals, "Lynch law" is by far the better procedure than "due process," so frequently followed in waiting for developments.

The responsibility of the physician, whose advice is sought by an individual in regard to some tumor formation, is great, if he advises delay, and if during this period the tumor becomes inoperable locally, or destroys the possibility of a permanent cure by internal metastasis, the odium should fall upon him, and not upon the later surgical intervention.

In a clinical diagnosis of tumors, we may divide them into three groups:—benign, doubtful and malignant.

If a patient first comes under observation when the tumor is undoubtedly malignant, there is no question in regard to immediate operation, and should the operation fail to cure permanently, the fault lies with the patient.

A clinical diagnosis of a benign tumor should only be made in those cases in which there is no possibility of mistake. This is possible in many instances, and an operation need not be advised. All tumors which are not benign or malignant, belong to the second group. In such tumors delay is never justifiable. Immediate surgical intervention should be not only advised but urged.

It is in this group of tumors in which a clinical diagnosis sufficiently positive cannot be made, that the relation of surgical pathology to diagnosis becomes of paramount importance, because our inability to make a clinical diagnosis demands an exploration of the tumor, and at this exploration we should be prepared to recognize the lesion by the gross appearance of the disease exposed by the knife. The object therefore of surgical pathology is to

instruct in the positive recognition of surgical lesions by their naked-eye appearances. The study of surgical pathology demonstrates that such a gross pathological diagnosis is possible in the great majority of instances. The thorough investigation of what we may call the clinical history and picture, the gross pathological appearances confirmed by microscopic study, and the ultimate result after operative interference demonstrate that

1. A certain number of tumors can be recognized from the clinical history and picture as benign; in some of these cases operative removal is not necessary, in others in this group operation is indicated on account of the size or discomfort of the tumor, or because experience demonstrates that these tumors have a tendency to become malignant, and of course there can be no dispute that it is far better to remove them in the benign period;

2. In other tumors it is absolutely impossible to make a positive diagnosis; for this reason an exploratory operation is imperative. The nature and extent will depend upon the character of the surgical disease exposed by the knife. A naked eye diagnosis is possible in the majority of cases;

3. Unfortunately, a large majority of tumors come to the surgical clinic at a stage when there is no doubt in regard to their malignancy. Operation, of course, is indicated, if operable, but the study of the ultimate results demonstrates that when a malignant tumor has reached the stage in which there is no difficulty in making a clinical diagnosis, the possibilities of a cure are greatly decreased, and in many instances they have become incurable because of local infiltration or internal metastasis. In other words, if we wish to improve the results in the permanent cures

of malignant tumors, we must instruct the public that they must seek the advice of a physician the moment their attention is attracted to a tumor formation. And the practitioner must never delay in advising and urging these patients to submit to immediate operation, except in those cases in which there is absolutely no doubt of the benign character of the tumor. And not only this, but also that the benign tumor in question has no tendency to later become malignant.

The earlier the individual seeks the advice of the physician, and the earlier the tumor comes to the surgeon, the more will the importance and the necessity of the naked-eye recognition of the surgical lesion be demanded by exploratory incision.

4. The study of surgical pathology demonstrates that malignant tumors vary enormously in their malignancy.

NOTE.—All of the points in this introduction were amply illustrated by excellent illustrations taken from the cases at the Johns Hopkins Hospital, and thrown upon the screen by the stereopticon.

THE ESSENTIAL POINTS OF DISTINCTION BETWEEN CEREBRAL AND MENTAL DISEASE.*

HIRAM A. WRIGHT,
Detroit.

An essay having this title would be uncalled for were it not for the fact that too many medical men entertain the idea that when a person becomes insane, some area in the brain cortex is the seat of the difficulty. If it were true that insanity is always, or even occasionally, dependent upon some cortical change, then it would be proper to consider insanity as a symptom, or complex of symptoms, dependent upon the cerebral lesion which induces it. Were this a true premise, then we should logically conclude therefrom that the various types of mental disease, such as melancholia, mania, stupor or paranoia, should be considered as types of cerebral disease, not mental disease.

The question would naturally arise then, what kind of a lesion of the cortex will induce melancholia in one patient,

mania in another, and paranoia in a third? If insanity were dependent upon lesion of the cortex, this question ought to be satisfactorily answered by those who claim that cerebral lesion is necessary to induce insanity. But it is offered as a reply that in many cases there is no organic lesion demonstrable in the brain of one who was manifestly insane during life. In such a case we are asked by some to accept the theory, now being ardently advanced by many neurologists, that defective metabolism, toxæmia, or auto-intoxication, is responsible for the insanity observed. No doubt in some cases these phenomena (toxæmia or auto-intoxication) are associated with insanity, but is it not more reasonable to believe them results of, or concomitants with the insanity, rather than the causes thereof? Particularly so in cases of melancholia or stupor, where the patient, being despondent, and inactive physically, indulges in little or no exercise, frequently has constipation and digestive disturbance. In such cases we

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might naturally expect to find some defective metabolism, or a germ-laden intestinal tract infested by both pathogenic and non-pathogenic organisms.

Those who assert that such bacterial, or toxic agents are etiologic factors in the production of insanity have not observed them until after the patient became insane, not before the insanity became manifest.

If a bacteriologist should make an examination of the blood, or intestinal contents of a person regarded as sane, and should find certain toxic or bacterial products, would he dare make the prediction that because of his findings, the person is therefore liable to become insane? No! but yet many alienists have been free to assert that in some cases these toxins are causes of insanity, rather than concomitant or coincidental phenomena.

There can be no doubt but what toxæmia and bacterial infection of intestinal contents are both quite frequently observed among the insane, perhaps proportionately more frequently than among sane; but this does not by any means establish the truth of the claims put forth that such physical states are causes of insanity; far from it.

What more is the little "bug" going to be accused of? He is responsible for a great many physical diseases which a few years ago were ascribed entirely to other causes; let us not make him responsible for that which in the nature of things he cannot be, if we properly comprehend what mental disease means.

We have dwelt somewhat at length upon this phase of the subject, because it is the latest theory advanced by some recognized alienists and neurologists as a feasible explanation of the cause of some cases of insanity; not because we accept it as true, for we reject it entirely as untenable and wildly speculative.

Toxic blood states at best can but produce delirium. Delirium, however, is not insanity, some writers to the contrary notwithstanding. To consider a little further the subject of organic lesions of the brain in this connection, it must be remembered that about 80 per cent. of all cases of insanity are classified as inorganic psychoses. By this it is meant, no change in the brain is found post-mortem in patients suffering from these types of mental disease, and since we find a considerable proportion of patients suffering from organic diseases of the brain, who during life show no signs of mental derangement, why should we adhere to the opinion that mental disease is therefore dependent upon brain change, organic or otherwise?

Sometimes, it is true, we find in the brain of those who during life were manifestly insane pronounced pathological changes, but this does not prove that the insanity was dependent upon the lesion found in the brain, since that many insane patients manifest very similar symptoms and yet display no evidence of organic brain disease whatsoever upon postmortem examination.

The brain of the insane patient is liable to organic disease just as is the brain of the sane. A person suffering from brain disease is liable sometimes to become insane, just as the person who is free from brain disease. We know these facts to be true, they are not mere trumped-up theories.

As we have said above, more than 80 per cent. of all cases of insanity show no brain disease on post-mortem examination. This being true, what, then, is mental disease? The question can only be answered intelligently by one who has first studied what the normal mind is. Just as the medical student, in order to comprehend the full

significance of certain pathological conditions of the body, is first required to familiarize himself with the normal condition of the several organs of the body, so we deem it proper that in order that a student or a medical man may comprehend what mental disease is, he should first form some definite conception as to what normal mind is.

"The brain is the organ of the mind," is a familiar sentence used by many neurologists to explain the unknown dependence of mind upon brain, but what does the sentence mean? Do we ever hear anyone attempt to explain what they mean by saying "The brain is the organ of the mind?" They surely do not wish us to believe that it is the organ of the mind in the same sense that we believe the liver to be the organ which secretes bile. We choose to explain the relationship between mind and brain by saying the brain is the physical organ, by which intellectual processes are made manifest.

There is a wide distinction between the idea of intellectual processes being dependent upon cortical integrity, and believing that intellectual processes are made manifest by means of nervous activity. Students of medicine who have never studied psychology are accustomed to account for consciousness and intellectual processes incident thereto on physiological grounds. They have neglected to study the very science essential to a proper comprehension of the subject; namely, psychology. One might as well attempt to understand thoroughly the subject of septic infection by absolutely neglecting to study bacteriology, as to undertake a comprehensive study of mental states, normal or abnormal, without psychology; and yet this is the position occupied by nearly every medical man engaged in practice now, for the reason that the subject

is not given sufficient attention in the curriculum of medical schools in general.

The central thought in connection with the whole study of insanity, or even sanity, is the fact that certain beings display that phenomenon known as consciousness. To define consciousness is, to me at present, impossible. The only way we can comprehend its meaning is by the introspective study of psychology, and in this is implied all that is meant by the sentence, "I know, thus and so," not what I believe, but what I know. When we can comprehend what we mean by the "I" in the phrase "I know," then we have made the step in progress necessary to understand what is the seat of consciousness and what constitutes the complete conscious process.

In order that a person be conscious of the existence of objects about him, he must not only be possessed of healthy sensory tracts in his nervous system, but normal intellectual faculties in addition thereto. By this I mean, we must not only see the object, but we must perceive it as well, in order that we may be conscious of its existence. Seeing is a physical sense, perception is an intellectual faculty. They differ from one another, yet one is the complement of the other in a process resulting in consciousness.

Seeing is made possible by nervous activity, and is a physical activity alone. Perception is a metaphysical activity not dependent upon the physical organism for its existence. We cannot define perception in the same way we can define digestion or gravitation, except to say that it is a process incident to consciousness, which occurs in time only, and not in space. Because that perception cannot be defined is no reason why we should discard metaphysics entirely as a proper subject to study, any more than that because

you cannot define light, you should therefore refuse to study physics. Psychology is properly considered a branch of metaphysics, but unfortunately it is taught as being a physical science; and psychical processes are taught as being dependent upon cellular activity. This assertion is unproven, and is but an assumption made by those who cannot disregard the fact of consciousness, yet wish to account for it on physical grounds, rather than be regarded as indulging in metaphysical speculation, "so called." Since that we cannot account for consciousness on a physical basis, nor can we deny the fact of consciousness, how can we, therefore, in the study of conscious processes disregard metaphysics, and be logically consistent as students?

The practical result of this study, in my opinion, will result in the home treatment of a large number of insane patients now

being cared for in institutions. There can be no doubt but what many cases would recover sooner if cared for in their homes under the intelligent direction of the general practitioner than they possibly can when confined with a large number in a large institution. But since medical men are not now interested in the subject sufficiently to devote their time and talents to a critical and analytical study of insanity, there is nothing left for them to do for their insane patients but to have them committed to the asylum, there to be cared for as one of many, not as an individual. This would result in greater good to the patients so cared for, larger financial returns to our already not-too-well-paid profession, and relief to the now over crowded institutions maintained at public expense to care for those for whom home treatment is quite inadequate and impossible.

STANDARDS OF MILK SUPPLIES IN DETROIT AND VARIOUS CITIES.*

GUY L. KIEFER,
Detroit.

A wholesome, clean milk supply and how to obtain it, is a problem that has confronted sanitarians in this and other cities and, in fact, in this country and in foreign countries, for some years. Milk is one of the most common articles of food. It is nutritious, as it contains, in easily digestible form, representatives of all classes of nutrients required by the body. Milk is generally used in the raw state; it is seldom cooked, by which process dangerous bacteria would be destroyed. Impure milk may cause serious

and even fatal diseases. Frequently cow's milk is the only nourishment taken by infants and invalids, and it is these who are least able to withstand the ill effects of impure foods. Vital statistics show that about one-third of all deaths are of infants, and that a very large percentage of these die from diseases of the digestive tract. Again, epidemics of various diseases have been definitely traced to infected milk. These are some few of the reasons why a pure, clean milk supply should be furnished to all communities.

For the purpose of improving the standard of milk, the various state and local

*Read before the Wayne County Medical Society, Dec. 10, 1903.

boards of health throughout the country have been instrumental in passing laws requiring milk to be of a certain chemical standard and free from adulteration by the addition of any preservative or other useless and very often harmful chemical. This "chemical standard," if I may use the term, is practically the same throughout the various cities of the United States and is similar to the standard required in Michigan and in Detroit, viz., the milk to be sold as pure must contain not more than $87\frac{1}{2}$ per cent. of water, nor less than $12\frac{1}{2}$ per cent. of milk solids, of which not less than 3 per cent. shall be fat, and the specific gravity at 60° Fahrenheit shall be between 1,029 and 1,033.

For a number of years sanitarians were content to raise the milk standard as indicated by the above requirements. Milk inspectors were appointed in the various cities, samples of milk were collected from various depots, stores and wagons everywhere throughout the city, and these samples were subsequently analyzed. More or less severe penalties were imposed upon persons found guilty of violating the milk laws. This reform has undoubtedly done much in promoting the public health and in reducing the mortality, because milk that has been watered or is below the "chemical standard" for any reason, is certainly not as nutritious as a richer milk. But, after all, a milk may be rich, may go beyond the legal requirement in its chemical constituents and still be more harmful because of bacteriological contamination than a milk of lower chemical standard. This side of the question is presenting itself more forcibly of late to all students of this subject and considerable work has been done during the past few years along this line. The most systematic and undoubtedly the most success-

ful work has been accomplished in New York City. Under the leadership of Dr. Park, the milk supply of that great metropolis has been raised to a very high standard. The idea of requiring a "bacteriological standard" occurred to Dr. Park almost accidentally. He happened to notice that a number of kittens, fed on milk supplied to a certain hospital, promptly died, although the milk had met the tests of quality and adulteration satisfactorily. An examination of this same milk for the number of bacteria, showed millions in a cubic centimeter. This examination was made with reference to the number only and without reference to the particular kind of germ contained in the milk. It was known to Dr. Park, as it is to all of you, that milk containing specific microorganisms, as for example the bacillus of diphtheria or of typhoid, could be the means of spreading those specific diseases. But the next step in the New York campaign for pure milk was to show that a large number of bacteria, harmless in themselves and when not found in milk, may prove dangerous and harmful when contained in the milk we drink. It was consequently demonstrated by experiments upon kittens that milk thus contaminated is not a proper article of food and these experiments were verified upon the human being by carefully collected reports and statistics based upon infant mortality in New York together with a close study of the milk upon which the babies had been fed. The fact was soon established that milk containing a large number of bacteria is not wholesome; the next problem was, how to remedy the evil. Milk as it comes from the clean udder of a healthy cow is not entirely free from bacteria, it may contain from 400 to 5000 to the c. c. This number, unless it contain the specific

organisms of a given disease, is entirely harmless. The problem, then, is to keep the bacteria from multiplying. This can be done by attention to two things; firstly, by cleanliness in handling and secondly, by a process of rapid cooling of the milk and keeping it cool. In New York a commission of physicians was organized to co-operate with the Board of Health. This commission is known as the "Milk Commission of the Medical Society of the County of New York." It has brought about a wonderful change in the milk supply of New York by its work. The commission in turn has secured the co-operation of the milk dealers by agreeing to certify to milk that is of a certain standard of quality and cleanliness. Milk in order to be labeled "Certified by the Milk Commission of the Medical Society of the County of New York" must not contain more than 30,000 bacteria to the c. c., and this means that the milk must be handled from the cow to the consumer in the most scrupulously clean manner, and it must be cooled quickly after milking and must be kept cool. The commission also guarantees a second grade of milk, and this second grade is labeled as "inspected by the Milk Commission of the Medical Society of the County of New York." The commission's requirements for inspected milk are not so rigid as for the "certified," but they are nevertheless rigid as they require that inspected milk shall not contain more than 50,000 bacteria to the c. c., and that means a very careful handling of the milk. It is understood, of course, that in each case the milk must be of the legal chemical standard.

Inasmuch as such great advances have been made in the large city of New York, other cities are following her example. In Philadelphia similar work is being

done, milk being certified by the milk commission of the Philadelphia Pediatric Society. In order to receive the guaranty of this society they require that milk shall contain no more than 10,000 bacteria to the c. c.

In Boston the same end is accomplished by strict laws requiring proper feeding of the cows, proper keeping of the same and proper handling of the milk. As the number of bacteria is only a means of detecting how the milk is handled, it makes little difference at which end we put our restriction. A law that requires bacteriologically clean milk is the same in effect as one that requires healthy and cleanly kept cows, clean stables, clean milkers, clean utensils and proper cooling of the milk.

This question is being rapidly taken up all over the United States. In various cities bacteriologists are at work making examinations of the bacteriological pollution of the milk supply. The results of these examinations are astounding. Sedgwick in Boston found an average of 2,300,000 per c. c. in the market milk of that city in the spring of the year; Bassett found the average in Baltimore to be 4,000,000, while in Buffalo, Snow reports from 1,000,000 to 4,000,000 per c. c., grocer's milk being the worst. Again Coler says that samples of milk collected in the City of Rochester showed from 100,000 to 1,500,000 bacteria per c. c.

In European cities in general the number of bacteria is very much higher than in American cities, judging by the above named cities as examples. In a few cases in the European examinations the milk was found to contain less than 5,000,000 bacteria per c. c. In many cases the bacteria contents reached 10,000,000 and not infrequently 20,000,000, and in some

samples in the city of Giessen the numbers ran up to 180,000,000.

In Detroit the bacteriological examination of milk was begun in the summer of 1902. Our samples have varied from 11,000 to 8,000,000, and in one sample we found 16,000,000. The samples containing the smallest number were taken from milk sent in from the country and collected at the station immediately upon its arrival. It has been our endeavor whenever we have found badly polluted milk to correct the evil by a personal call on the part of the inspector at the particular dairy with a view to tracing the sources of contamination. It is the intention of the Board of Health to adopt more rigid rules to bring about a more careful handling of the milk that is supplied to

our citizens. In just what manner this result is to be accomplished has not been decided—for the present we are requiring all milk dealers to obey the laws as far as the "chemical standard" of the milk is concerned, and if a discussion of this subject has the effect of bringing about a demand for a cleaner milk supply, it will be the easier for the Board of Health to bring about the desired result. What is needed is the support and co-operation of the medical profession, the milk dealers and the public. If the doctors will aid in teaching their patients that better milk costs more because of the extra care needed to produce it and that it is worth all that it costs, then dairymen and dealers will produce a better article because the demand for such will have been established.

MILK IN ITS PATHOLOGICAL RELATIONS.*

GEORGE DUFFIELD,
Detroit.

Vital statistics show that about one-third of all deaths are of infants, and that a very large percentage of these die from diseases of the digestive tract. These diseases are said to be principally due to impure food; it is, therefore, reasonable to assert that the great mortality of infants has a close relationship to the condition of the milk supply.

In certain cities where earnest efforts have been made to improve the milk supply, the mortality of infants has been greatly reduced.

Milk may look the same, whether it contains 200 or 500,000 bacteria to the cubic centimetre.

Unlike other foods, milk is used in a

raw state. It is seldom treated to a heat strong enough to destroy dangerous bacteria with which it is too often contaminated.

The fact that many infants are taken from their mother's breast and put on ordinary cow's milk, such as is sold at the corner grocery, or from some milk carts that are unsanitary, and whose milk is alive with bacteria, the result is evident, the death of such children.

The number of bacteria in milk depends upon three conditions:

1. Cleanliness in handling.
2. Temperature to which it is cooled within one hour or less after milking.
3. The age of the milk.

One exhibit will suffice to show the bacterial content of milk.

*Read before the Wayne County Medical Society, Dec. 10, 1903.

Experiment reported by the New York Health Department.

"A sample of milk taken under good conditions contained, immediately after milking, 300 bacteria to the drop. It was cooled to 45° F., and kept at this temperature; after 24 hours it contained 200 bacteria to each drop; after 48 hours 900; after 72 hours 150,000.

"Another sample taken in a dirty barn, cooled and kept at 52° F. contained at first 2,000 bacteria in each drop; in 24 hours 6,000; in 48 hours, 245,000; in 72 hours, 16,500,000."

The ability of milk to resist the growth of bacteria, when kept at 38° to 45° is indicated by these experiments; freezing the milk renders the milk unfit for food.

Odors and peculiar flavors of milk are due to bacterial action or to volatile oils of some foods, such as onions, turnips and garlic.

The number of bacteria in cream is nearly always far greater than in milk—the thicker the cream, the older it is and the greater the bacterial growth.

Freeman, whom I have quoted before, claims that the bacteria of cream were 300 times as numerous as in the milk left behind, the bacteria evidently being carried up with the fat globules.

Centrifugal cream is to be preferred, as it can be marketed twenty-four hours earlier than gravity cream.

The micro-organisms of milk:—Most of the common bacteria grow readily in milk. There is no better culture medium made in Nature's laboratory for the development of bacteria than cow's milk.

The micro-organisms may come from
1. *Disease in the cow.*

The udder may be the seat of an inflammation with streptococci or other pyogenic bacteria present. These enter the

milk in large numbers and are often the cause of attacks of gastro-enteritis. Tuberculosis in the cow does not always mean tubercle bacilli in the milk, unless the udder itself is the seat of the disease. But from a scientific standpoint milk must be regarded as one of the possible sources of tuberculous infection, and all precautions must be taken to prevent its sale and use.

Out-breaks of disease have been definitely traced to infected milk. We are growing wiser each day we live, and we should appreciate the danger of milk and the ease by which contagious diseases are spread by this article of food.

In January, 1900 (but three years ago) Kober, in the *Amer. Journal of the Medical Sciences* (May, 1901) collected records of 330 outbreaks which were spread by milk. There were 195 out-breaks of typhoid fever; in 145 instances the disease prevailed at the dairy; in 67 the milk was diluted with infected well water; in seven the cows waded in and drank polluted water; in 24 cases the employees, the milkers and dairy attendants acted as nurses to typhoid cases, and in 10, employees continued to work although they themselves were suffering from the disease. The utensils about the dairy, such as pans, bottles and strainers, were washed with polluted well water.

On the 99 epidemics of scarlet fever, there was disease at the farm or dairy in 68; 17 employees were themselves affected, and 10 employees acted as nurses to 56 patients.

Of the 36 out-breaks of diphtheria studied, the disease was at the farm or dairy in 13; three employees themselves were ill, and in 12 the cows were suffering from inflammation of the udder.

Other bacteria found in milk may come from

2. *The air of the stable.*
3. *The hands and clothing of the milker.*
4. *From the dirt that falls into the milk from the udder, belly and tail of the cow.*
5. *From the manure of the cow either in the stall or dried particles in the air.*

A petri-gelatine plate exposed beneath a cow's udder for one minute during milking in an unsanitary barn—and there are many such—contained 4,450 colonies of bacteria.

There are other forms of bacteria in milk, while not strictly speaking pathogenic, but when present in milk in large numbers so change and impair the nutritive properties as to render it unfit for food and in young children and infants may cause serious intestinal complications. These are:

1. Those that cause the souring of milk—the lactic-acid producing group—which act upon the milk sugar.
2. Those that act upon the milk pro-

teids, inducing fermentation and putrefactive changes.

3. Those that cause coagulation of the casein and subsequent peptonization of the coagulum.

There should be a bacteriological standard. We have heard that our health officer has demanded that the milk sold in Detroit should contain no more than 100,000 bacteria to the cubic centimetre. Let us, as medical men, impress upon him and upon our milk inspectors that milk sold in cans shall contain no more than 100,000 to each c. c., while bottled milk shall contain under 30,000 per c. c.

The health officer of Rochester, N. Y., supplied milk with a daily average of not more than 14,000 bacteria to one c. c., while the milk from the farmers, as sold from the cans and the wagons, contained 235,000 per c. c.

Let us demand purer milk and by appointing a milk commission, let us educate the public to demand clean milk.

HOT SPRINGS, ARKANSAS, FOR CHRONIC RHEUMATISM.

WILLIAM F. BERNART,
Hot Springs, Ark.

The problem of the detrimental influence of the cold blasts of the North upon rheumatic subjects confronts all physicians in practicing in localities subject to sudden and rigorous changes in weather. The convalescents from acute attacks are frequently relegated to the category of chronic rheumatics by this uncontrollable medium, where otherwise, had climatic conditions been favorable, the case would have progressed to a favorable end. The interference with elimination, a matter so essential in all cases of true chronic rheumatism, the necessity of a more stringent medical treatment to combat the baneful

influence of the retrogression caused by unfavorable climatic conditions, are factors inimical to a rapid or final cure. Upon this basis, I do not hesitate to advocate this resort as admirably equipped for the welfare of rheumatic patients during the wintry weather of the North.

From a climatic standpoint, Hot Springs of Arkansas compares favorably during the winter months with other southern cities, the average temperature being but slightly lower than at New Orleans; besides the patients have the advantage of the eliminating waters which exert the greatest beneficial influence in all

varieties of chronic rheumatism. With an elevation of 1,000 feet above sea level, perfect drainage, a fresh and wholesome atmosphere free from smoke and obnoxious odors from factories, there is nothing lacking to fully comply with all requisites of an ideal health resort.

Before confining my remarks to the advantages of treatment at this place, a few words upon the position of resort practitioners and the meaning of "chronic rheumatism," will not come amiss. The physician's duty at any of nature's health resorts lies first in the recognition and study of the natural resources; secondly, in their application to the various cases; and, thirdly, in the inauguration of the treatment that will be productive of the best results. In the study of the natural resources and their application, the resort practitioner stands alone; but in the therapeutic treatment, the history of the case and experience of the home practitioner are factors of inestimable value to the resort physician and the welfare of the patient. Few physicians refer a patient to a surgeon for operation without the addition of a concise history, yet many doctors allow their patients to cross the continent in search of health and never think that a full history of the case would be of value; if there is a difference, it is a difference without a distinction for the ultimate end, the welfare of the patient, is the same in both cases. To advance this recognition between home and resort practitioners I formulated a few rules (*Journal A. M. A.*, Vol. XLI, No. 13, page 795) which, if followed, would unquestionably be of value to our invalids, among whom chronic rheumatics constitute no small percentage.

The term chronic rheumatism, as popularly used by the laity, is permissible,

but to the physician it ought to imply more than a long continued painful condition. The convenience of the term, the ease of its application, the knowledge it conveys to our patients often causes us to neglect a more careful scrutiny of the etiological factors. The frequency of flat-footedness, relaxation after injuries, germ infection, syphilis, metallic poisoning, occupation neurosis, and sequelæ to some infectious diseases, producing symptoms many times erroneously called chronic rheumatism, should incite us to exert greater care in our diagnosis, for the success of our treatment is based entirely upon our accuracy in recognizing the pathological changes and the cause thereof. After a perfect recognition of the existing conditions in certain cases and a trial of the indicated treatment, there comes a period when the indifferent results obtained or backsliding of the case demands a search for other resources and in what is to follow I will attempt to place before the readers of this article a general outline of the therapeutic action of these waters when combined with a judicious medicinal and mechanical treatment.

Acknowledging the case to be one of true rheumatism, unaffected or made worse by treatment applicable to home use, influenced by a severe and changeable climate, with prominent symptoms of disturbed digestion and circulation, pain, anæmia, and debility, we have a picture that will serve the purpose of a test case. Upon his arrival, the first impression is of a metropolitan city where all things are arranged for the convenience of the invalid, the inhalation of a balmy and fresh atmosphere and, in a short time, the realization that he is not alone in his affliction but that thousands of other human beings are with him in the search for health,

many of them on the way to recovery after having been in even worse condition than himself, all tend toward an ease of mind and resolution to get well. These two conditions recognized as valuable adjuvants by all physicians, are a natural sequence and pave a smooth way for the more difficult work of the doctor.

After a sufficient rest, a thorough examination is given the patient, including an examination of the urine in all cases and of the blood if necessary; besides this, a matter of no small importance is a memorandum of the correct weight. The temperature, condition of the heart, arteries and lungs, the general strength of the patient and the existence of localized points of inflammation often produced by traveling, are important in indicating the treatment. Oftentimes a great amount of harm is done providing certain details are neglected at the start. All conditions being favorable, the patient is usually placed for the first few days upon a system of bathing that will stimulate the activity of the skin and circulation, after this the elimination is carried to any desired degree. The diet and habits of the case are regulated at the very start, future changes being made as required. The judicious drinking of water is of as much importance as the baths. People unaccustomed to the injection of large quantities of fluid, and especially hot water, require the most

careful instructions or otherwise disagreeable effects are liable to follow. The prescribing of various douches and packs are of inestimable value; in chosen cases the physician's better judgment, however, must control these procedures; the same can be said about massage. In the medicinal treatment, the greatest care must prevail, for drugs formerly inefficient may under the influence of these waters produce the desired results. In some cases a thorough eliminative course is advisable and advantageous before any medicine is given, others are placed immediately upon a vigorous anti-rheumatic treatment, while in some cases a strict tonic treatment is indicated. Internal treatment must often be supplemented with, or displaced by, external applications or subdermal medication. Operative procedures are at times indicated, but as the patient comes here to test nature's resources, their co-operation is hard to gain and even the argument of the beneficial influence of the waters during convalescence from the operation, is as a rule insufficient to gain their consent.

After all is considered, it can be safely stated that the key note of success lies in the stimulation of absorption and elimination and the establishing of a proper ratio between the two, combined with a proper medicinal and mechanical treatment.

Diagnosis of Typhoid Fever in Its Earliest Stages.—(1) The earliest and most trustworthy sign is the presence of the typhoid organism in the circulating blood.

(2) The typhoid bacillus is found in the feces later than in the blood.

(3) The bacillus typhosus is also found in

the rose spots. Its presence here is a trustworthy sign.

(4) You can seldom obtain the Widal reaction in the earliest stages of the fever. It is only of value in the higher dilutions.—(*The Amer. Jour. of the Med. Sciences*, Jan., 1904, William Colby Rucker, M. D.)

THE CAUSE AND TREATMENT OF
MORPHINE INEBRIETY.*W. M. DONALD,
Detroit.

Computation founded on fairly good evidence gives the number of morphine inebriates in the United States at one hundred thousand. The figures seem alarming, and yet I think are quite within the mark. It would seem, moreover, as if the number were increasing rather than decreasing. Such a condition argues strongly for the vast importance of this subject.

A short time ago the well known novelist, Kipling, in addressing a society of medical men in England, made the statement, which, at that time, was looked upon with some incredulity and not a little surprise, that the ordinary Oriental took his opium as the ordinary Occidental took his tobacco or beer. He stated that, from his own observation in India, the coolies or Hindoos carried opium in the form of pills or pellets around with them, and when weary from labor or loss of sleep, indulged in some small dose of the crude opium. The effect, as far as observable, was exactly the same as the effect upon the Occidental from the use of a pipeful of tobacco or a chew of the same luscious weed—soothing nervous irritability, allaying mental excitement, stimulating muscular effort.

A coolie might take one or several opium pills in a day, or possibly none at all. But as a rule, he took his opium exactly the same as the American navvy took his pipeful of tobacco, with regularity and without apparent injury, and without the production of an excessive appetite.

He put it tersely this way: That what tobacco and alcohol was to the Occidental, opium was to the Oriental. And he elaborated at further length the fact that millions of Orientals use the extract of the poppy regularly, systematically, and without any apparent detriment to health.

These facts adduced by Mr. Kipling at the time have been substantiated since by other observers, and are believed to be strictly in accordance with the truth.

For some unexplained reason the ordinary Occidental, while able to indulge with moderation in both alcohol in its milder forms and in tobacco, without allowing himself to run to any extreme in the matter, or without becoming a pronounced victim of either habit, is quite unable to follow the same system in the use of opium.

Any denizen of the western countries who commences to indulge in opium or in any of its preparations in moderation, all too soon becomes a victim of the insatiable desire for larger quantities of the drug, and all too soon an inebriate and a wreck.

The most pronounced and most potent etiological factors in the production of morphine inebriety, may be put down as pain—physical or mental, real or fancied—and insomnia.

Once in my own life have I received a hypodermic injection of morphine. It was given to allay a most excruciating abdominal pain, and its effect was instantaneous. Never shall I forget the relief that came; one moment being a sufferer from the most intense agony, and the next, experiencing a sense of complete comfort and

*Read before The Wayne County Medical Society, Nov. 12, 1903.

relief from pain, with a feeling of super-added, delicious languor stealing over me.

I have often thought of my experience at that time, although it happened years ago, and have been guided by it to a sense of the vast danger hovering around a person suffering from some painful malady, who is fortunate or unfortunate enough to have a complaisant physician of a tender heart, all too ready to relieve pain by this fatal, yet all potent, method.

And I wish to state here in this connection that, in my experience, physicians are responsible for a large majority of cases of morphine inebriety in the world today.

Of the last four patients that I have treated for this disease two of them were physicians, and one was a physician's daughter and a physician's sister. The physician's daughter had acquired the disease through the administration of the drug by a physician for severe ovarian pain. He had dispensed it to her at first himself, but becoming careless, had permitted her to obtain it from the drug store, where she very quickly obtained a knowledge of the true nature of the prescription, and very shortly became a regular habitue of the drug. The two physicians acquired the habit in their student days. One of them broke away from it for a time, but becoming infected with a low form of malaria, with its consequent depression, he shortly returned to the use of the drug for its stimulating effect. This, I may say, was before he came under my observation and under my care. Both of these men, learning something of the stimulating effects of the drug at college, and finding little effect from the use of alcohol, had resorted to it to stimulate during a hard college course. These two cases would suggest another point of etiological importance, viz., the great frequency with

which physicians are becoming victims of the morphine habit.

The fourth patient of whom I speak was a lady who also suffered from a severe painful affection, and was cared for by a careless physician, who quickly allowed her to obtain a knowledge of the drug she was taking for the relief of her pain, and very quickly permitted her to resort to the drug, to the extent of habituation.

I mention these simply as proofs of the statements I made before, that physicians were responsible for a large majority of the cases of drug addictions today.

In my own practice, where I find it necessary to give opium or its salts, I have made it a rule to, as much as possible, dispense the drug myself. Only under most extraordinary circumstances do I ever allow the prescription for morphine or opium to go to a drug store, where there is always danger of the patient coming in and having the prescription repeated.

Even when I give hypodermic injections for the relief of pain, I make it a rule to instruct my patient that the injection I am giving him contains not only opium but other drugs as well, so that he will not come to a belief that the whole relief has come from opium alone.

It seems to me that with greater care in this matter, the possibilities for the prevention of the habit in the use of these drugs for the relief of pain would be greatly increased.

I think it is impossible for us to get along in the practice of medicine and the treatment of patients without the use of opium. But I do think that, with a proper knowledge of the dangers incurred in its use, and with proper care for the prevention of the knowledge of the drug used coming to the patient, that it would be

possible to eliminate largely this etiological factor.

In my lectures to third-year students, I make it a rule, that is given to them with insistence, that morphine or its congeners, while all potent and invaluable as a remedy, is one of the most dangerous drugs in our Armamentarium. I have always felt that, with insistence upon this point, with a young physician in the formative stage of his career, our hopes for inducing greater care in the prescribing of the drug and the use of it are vastly increased.

This is a subject that comes home to each of us with special and increasing force, and I know that if I felt I were responsible for the production of morphine habituation in a single patient of mine it would be a reflection to me always upon my career, and would be a burden for me to carry for the rest of my life.

I insist upon this point, for it seems to me of the vastest importance.

Another etiological factor in the production of morphine addiction is, as I have said, the use of the drug for insomnia. In this regard I do not believe that physicians are to blame, for I believe that few physicians use morphine for the relief of sleeplessness, except sleeplessness caused by pain. But patients driven to distraction by continued loss of sleep are prone to take anything that comes handy for the relief of the distressing affliction, and finding morphine available and more or less potent, not infrequently acquire the drug habit through such means and without the intervention of a physician.

In this case, only by insisting upon the dangers incidental to the drug so that the public may become thoroughly cognizant of it, can we eliminate this factor.

There are other classes of people in danger of the habit—the neurotics, of

which America is so lamentably full today—and the idle rich, of whom America is producing now more than her share. These two acquire the drug of their own volition—the neurotics to seek the stimulation which will permit them to accomplish duties all too trying for them, and to carry burdens all too heavy for them; and the idle rich, looking for new pleasures and new methods of eliminating ennui.

For these again physicians can do little beyond spreading knowledge of the dangers of the drug.

I might add another class of habitues, namely, that impressionable class stimulated by the reading of sensational literature, such as "DeQuincey's Confessions of an English Opium Eater," etc. This is a small class and deserves little notice.

Leaving, now, the cause of morphine inebriety, with this somewhat lengthy but all insufficient discussion of the etiological factors, we come to a discussion of the treatment of this disease. The treatments might well be called legion, for their name is many. The genuine cures, on the other hand, might, to use a slang phrase, "be almost put in your eye." I wish to go on record here (and in this regard I believe I am in accord with some of the best authorities) that in this disease the hope of a radical cure is based upon an exceedingly poor foundation. We can stop the use of the drug temporarily; we can put our patients in fairly good physical condition; but with them always lingers the remembrance of ease from pain, and the memory of the delicious narcosis, and the soothing and quieting influence of the drug, when they were suffering, or worried, or weary, or ill. Then all too soon comes a return to the use of the drug.

Here is a sample of a letter received

from one of my last patients—a physician—a strong, robust, vigorous man originally, who came to me voluntarily for treatment. He was cured of the habit with some little suffering incident to the cure, and is now taking up another business, his old business, viz., that of commercial traveler. He hates the habit as the devil is proverbially believed to hate holy water. He loathes it, and loathes the victims of it, and yet his words speak of the dangers of the recurrence even to a person in that mental condition. I will read you an extract from the letter and let it speak for itself:

“There is a certain well-known fact stored away in one’s consciousness, and that is the fact that the old drug can give one such a self-confident, well-satisfied feeling with himself; and a contentment for a time even with an otherwise miserable existence.”

In treatment, the first indication is that of prevention, to which I have alluded in discussing the etiology of this disease. Once again I wish to insist upon this truth, that physicians should teach themselves, and each other, and the public, that morphine is always a dangerous drug, and should never be used except on the advice of a physician. That physicians are so prone to the habit would indicate that they, with their familiarity with the drug, have grown careless and deem that they, at least, are able to refrain from its abuse, and hence that the necessity for care in its use has gone by. Their failure to avoid the deadly habit argues their human fallibility, even as that of other men. No longer can they raise their heads, as did the old Pharisee, and cry: “God, I thank Thee that I am not as other men.”

However, our patients come to us, vic-

tims of addiction. We have four courses open to us:

(a) The treatment by the sudden withdrawal, where the patient has the drug entirely withdrawn inside of a day or two—the so-called Levinstein method.

(b) The slow method, where it is withdrawn in fractional doses day after day until four to six weeks have elapsed before the last dose is administered.

(c) The substitution method, where other drugs, such as hyocine, chloral, atropia, etc., are given to take the place of morphine, and

(d) The rapid-gradual method of Erlenmeyer, where the drug is withdrawn rapidly and yet gradually, taking but a week or ten days to withdraw it entirely.

Of these methods, Levinstein’s is, in my opinion, a cruel and unsafe one. The intense suffering and the collapse, so often accompanying treatment by this method, debar the scientific physician from its use.

The slow method is too slow, and the ordinary patient drops out from our care before the last dose is administered, only to relapse in a very short time.

The substitution method offers, to my mind, little advantages over the continued use of morphine.

It is true that hyocine seems to have a very happy effect in the treatment of insomnia, so often accompanying the withdrawal of opium, and its use may be recommended in that capacity, but as a substitution treatment, other observers to the contrary notwithstanding, I have little faith in it.

The rapid-gradual method of Erlenmeyer is, except in extraordinary cases, my invariable choice. To treat a patient in this way, it is absolutely necessary, I believe, to have him in a suitably equipped hospital. Home treatment is useless.

Kind friends, or complaisant visitors, enable the patient to secure the drug without any difficulty, and the physician's efforts go for naught.

With Erlenmeyer's method, the patient is put into a room in a hospital, his clothing removed from him. He is confined to bed absolutely, and is not allowed to rise except upon the most urgent occasions. The morphine balance, so called, is established—that is, we find out within twenty-four hours just how much of the drug is necessary to keep the patient in a fairly comfortable condition. Since he is in bed, and exercising his muscles but little or not at all, we can reduce the drug to the minimum quantity necessary for the comfort of the patient, and we often find that the minimum quantity that will give him comfort is about one-half of the amount that he tells us he has been in the habit of taking before his entrance into the hospital.

The drug is then given in four or five divided doses during the day, and is reduced in accordance with the ability of the patient to stand it—in my own experience, averaging about half a grain a day. Little medicine is given except to treat symptoms. As a rule, I order *nux vomica* or strychnine for its tonic effect, and hot baths for their sedative effect; massage to the limbs and the back and spine relieves the intense aching, consequent upon this treatment, and the patient is fed as vigorously as possible. Occasionally, lavage is

used to wash out the morphine excreted by the stomach, and to neutralize the hyperacidity so common in withdrawal of this drug. Upon rest in bed, however, moderate doses of *nux vomica*, hot baths, and gavage or forced feeding I depend in the treatment of my patients. It is better always, of course, that a special nurse should be in attendance, so as to exclude the possibility of any of the drug reaching the patient, and the calls of visitors are, of course, for the same reason, inadmissible.

Ten days suffice, as a rule, to get the patient to the abstinence point, and four to six weeks afterwards is assigned as the time necessary to build up the shattered nervous system and to restore the depraved body cells.

I warn my patients always that it will take at least six weeks' stay in the hospital to put them in fair shape, and if they can give me eight weeks so much the better. At the end of about two weeks, if things progress satisfactorily, they are allowed to sit up in the room, and, if I feel that I can trust them, inside of a week or so longer they are allowed to get out of doors and go for a walk, preferably with a guardian, nurse, or reliable friend.

This treatment has given me decidedly the best results, and it is the one upon which I depend always in the treatment of morphine inebriates. Details, of course, must be handled as they arise in each individual patient.

The essential process of most of the erythemas (les erythèmes of the French) is a vascular change with exudate; blood, serum, alone or combined. While they are usually described as separate diseases, they belong to one family. They are characterized by:

(1) The similarity of the conditions under which they occur.

(2) The frequency with which the lesions are substituted in the same patient at different times.

(3) The tendency to recurrence, often through a long period of years.

(4) The identity of the visceral manifestations:

(a) Augioneurotic, as swellings of the fauces, changes in mucous membrane, causing colic, asthma.

(b) Inflammatory, as nephritis, pneumonia, etc.

(*The Amer. Jour. of the Med. Sciences*, Jan., 194, William Osler.)

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Editorial

A slight change in the arrangement of the columns in the original articles will be noticed in this issue of the JOURNAL. This alteration is made in order that reprints of original articles may be furnished without the necessity of resetting the type, thus insuring a saving of about 30 per cent. in the cost of the former to our contributors.

Hereafter reprints will have the same paging as the original articles, permitting of quotations alike from the journal or reprint, a convenience long appreciated by those using references from foreign journals following this method.

PRELIMINARY ANNOUNCEMENT OF ANNUAL MEETING.

On December 29, 1903, the Committee on Scientific Work of the State Society, composed of the President and the Secretary and the Officers of the Sections of the State Society, held a meeting at Ann Arbor to prepare the program for the Scientific Work of the Society at the Annual Meeting, May 25th, 26th and 27th, at Grand Rapids. A formal call for voluntary papers is made on page 61 of this issue. To give the Secretary of the Section sufficient time to make personal solicitation for papers in case enough are not otherwise received to fill the work of his Section a time limit for the recep-

tion of voluntary papers must be fixed. This date is fixed at *March 10th*. The By-Laws of the State Society require that the program shall be published 30 days in advance of the Annual Meeting, so that all papers must be in the hands of the Editor by April 10th.

Every member desiring to read a paper at the Annual Meeting will please send the title of his paper to the Secretary of the Section before which he wishes to read the same as soon as possible, not *later than March 10th*. See announcement on page 61 of this number of the JOURNAL.

A METHOD OF PROMOTING MEDICAL ORGANIZATION.

Practically all opposition or indifference to medical organization springs from a failure to understand the proposition. The proof of this is that both indifference and opposition vanish with a full comprehension thereof. Logically, the only way to secure a prosperous organization is a persistent presentation of the proposition, both in private and public. Every year there are many fresh arrivals in each county who need to be posted in the principles of medical organization, that they may fill the places of those who have died, emigrated, or been crippled by disease. Only such as have kept close watch realize how numerous are these changes. They emphasize the necessity of organizing individuals constantly. All this might be expected from the nature of organization as a living process.

It follows that the promoters of Branch and State organization must never cease activity—their work will never be finished.

Few really comprehend that membership does away with the red tape formerly

necessary to become a member of the State Society. They forget that the attempt was formerly made to separate the sheep from the goats at the annual meeting; now this is done by those knowing the parties in the local society, those upon whom it places the stamp of approval are by that fact members of the State Society. No more is there a long blank to fill out with one's medical pedigree endorsed by two old members of the State society; no more does the treasurer demand five dollars from each new member and three from every old one; no more is there a voting on the applicants by the entire body. In place of the five dollars, only two are now asked, and but two from each old member; or a saving of three dollars to each new member and one to each old one yearly. Every member of a Branch has equal rights with any other at the coming meeting at Grand Rapids—by showing that his dues are paid in his Branch—all the intellectual, and social and political privileges of the body are his. Thus it is evident that time, trouble, and money are saved members by the present arrangement over its predecessors.

This is only one of the many things illy understood or easily overlooked by members, unknown by outsiders.

The value of the *Journal* over the old *Transactions*, is conceded, but it might be vastly enhanced if it were better understood and members knew how to help themselves by helping it.

It is granted that this vast organization is capable of improvement, but even as it is now it has done immense good to all, with greater promise in the future.

Our point is that, to those who from a narrow horizon are unable to see the advantage of the organization, it is given to apply for light from the officials of their

local society or any active member therein, or to the councilor of their district or any other official. In turn it is for these officials to seek out the indifferent and fill them with the good things of organization.

NOVEL TREATMENT FOR GONORRHOEA.

Since the revival by Janet of the irrigation treatment for acute and subacute gonorrhœa, especially since the early users of this method were so enthusiastic in their praises, other methods have rather fallen into disrepute. The claims made for the irrigation treatment by the enthusiasts have never been verified by the more casual user. It is, therefore, something of a relief to have brought to our attention other methods for treating this common but peculiarly resistant disease. Two methods lately advanced have at least the advantage of novelty, and will doubtless prove effective at least in a certain proportion of cases.

Whitehead¹ claims the gonococci reside not in the cells of the mucous membrane but in the mucous plugs in the sulci and crypts of the urethral mucosa; and that to free the germs from their surroundings a process of digestion is necessary, and then germicides can have a chance to act. He accordingly has advised a salve made up of yellow oxide of mercury, oleic acid, oxide of silver, powdered scale pepsin, powdered caroid, alboline, lanolin, and water. One half drachm of this he instills into the urethra behind what he conceives the probable seat of inflammation. A little cotton applied to the meatus holds the ointment in place in the urethra. This application is made twice a day by the surgeon himself for six days. The treatment is painless and is

said to stop discharge in two or three days. Internal treatment with sandal oil, powdered cubebs, benzoic acid, powdered pepsin is also used. This medication is continued ten days after the local treatment is stopped. In case the discharge returns he occasionally has to give another course of twelve applications before the urine clears up completely.

Klotz² on the other hand has conceived the idea that "the mucous membranes showed much less irritation, subjective and objective, when such solutions were allowed to flow through the urethra in a retrograde direction, namely, from bulbus to the meatus, than when administered in the contrary direction." Hence his treatment based on this idea consists in the use of 3 c.c. of a silver solution of a strength, if of the nitrate, from $\frac{1}{8}\%$ to 2%, if of the organic forms, its equivalent, injected from a conical pointed syringe, the tip of which is inserted below the seat of inflammation. The solution is allowed to slowly ooze out from the meatus. In a few minutes a second application with this, or if the smarting is not great, with a somewhat stronger solution is made. The syringe used is similar to the Braun intrauterine syringe except the conical point is added.

Such a solution is used in its weakest form in the earliest stages of acute gonorrhœa. In fact he prefers to see patients at the earliest moment, for with these he gets his best results. The application is made once in two or three days and in the interval the patient uses an astringent injection from a small syringe several times a day.

On the morning after the silver application the discharge is thick and cheesy and much diminished in quantity. After a few days the discharge is seen to increase and at this time another treatment is

made. Under ordinary circumstances few applications are necessary to effect a permanent cure.

The use of silver nitrate in the acute forms of gonorrhœa dates back some years, but in 1894 Von Sehlen especially called attention to the fact that gonorrhœa could be cured in direct proportion to the time since infection had taken place. For this cure he used silver nitrate in the strength of 1-1000 with a small syringe and later retrograde irrigations with a catheter. It will thus be seen that Klotz has simply modified Von Sehlen's method of ten years ago, using the retrograde injection from the start. With the known germicidal power of the silver salts on the gonococcus, and this improvement in the technique in its application, it would seem as though this method presented possibilities worthy a little more than passing knowledge, and a thorough trial before it is condemned.

¹W. H. Whitehead, *Therapeutic Gazette*, 1903.

²Hermann G. Klotz, *New York Medical Journal*, 1903.

HARRISON D. JENKS.

NEWS ITEM.

Wexford and Missaukee County Medical Societies held a joint meeting January 13, 1904, at Cadillac.

The second meeting of the medical societies of Kent, Ottawa and Ionia Counties was held at Holland, January 15, 1904. A banquet was served at the Holland House in the evening.

HEALTH IN MICHIGAN.

For the month of December, 1903, compared with the average for December in the 10 years 1893-1902, inflammation of kidney, typhoid fever, scarlet fever, smallpox, meningitis, cholera infantum were more than usually prevalent; and diarrhœa, erysipelas, intermittent fever, inflammation of bowels, measles, remittent fever, whooping cough, inflammation of brain, puerperal fever and cholera morbus were less than usually prevalent.

County Society News.

BARRY COUNTY.

THE OPERATIVE INCISION.*

S. C. GRAVES, GRAND RAPIDS.

A. Preliminary discussion.

1. Preparation of instruments, dressings, sutures, ligatures, sponges, etc.

(a)* Instruments—Sterilized by boiling a few minutes in water which contains a little sodium carbonate.

(b) Dressings and Sponges—Sterilized by steam.

(c) Some sutures and ligature materials come from the manufacturers quite sterile. Silk, silk-worm gut and horse hair are sterilized by boiling in plain water. Silver wire is best sterilized by passing the same through an alcohol flame.

2. Preparation of Patient—Patients should be prepared generally and locally.

(a) Generally—Baths, douches, free catharsis, inhibition of much drinking water, light diet, etc., are important especially prior to severe operations.

(b) Locally—The mechanical factor is the all important one. Therefore scrubbing, shaving and scrubbing again do much for our patients. Douching with ether, bichloride of mercury and alcohol add to the security of the matter and should be employed. An aseptic dressing should be maintained on the parts for 24 hours prior to the operation.

3. Preparation of the Surgeon.

(a) Sterilization of the operator's hands and those of his assistants should be accomplished by processes similar to those employed in preparing the patient's parts.

(b) Use of rubber gloves properly sterilized.

(c) Use of cotton gloves properly sterilized.

(d) Use of gowns, head covers, nose and mouth masks.

B. Operative incision.

1. How made:

(a) Make your incision so as to cause the least possible damage to the tissues.

(b) Split muscular fibres in preference to cutting them transversely.

(c) Follow line of natural creases and wrinkles.

(d) Lose as little of patient's blood as possible by use of clamps and ligatures.

(e) Cut the tissues cleanly with cutting edge of knife (not the point) rather than haggle them.

(f) Operate with that degree of speed which lies near the point midway between the brilliant pass and the tardy one.

2. How closed:

(a) The tissues should be left as nearly as possible in the condition of normality.

(b) Drain when necessary.

(c) Before incisions are closed, they should be dry.

(d) Individual structures should be accurately and gently brought together by absorbable sutures.

(e) Tissues should not be choked by tight suturing.

(f) The less important structures can be reunited by material which is absorbed in a few days.

(g) In the more important structures, a suture is used which is more slowly or never absorbed.

(h) Sustention sutures can commence and end just beneath the skin.

(1) Skin is not perfectly aseptic.

(2) You do away with needle hole scars.

(i) Cutaneous sutures.

Use the shotted, subcuticular absorbable suture; reinforced by zinc oxide plaster strips. This suture makes only two small punctures, one at each extremity of the wound and serves its function admirably.

BAY COUNTY.

At the October meeting, a symposium on Venereal Diseases was held. The following papers were read:

ETIOLOGY AND DIAGNOSIS.

G. A. Williams, Bay City.

GONORRHOEA—Etiology—The causes of gonorrhoea are predisposing and exciting. The chief predisposing causes are the lymphatic temperament, undue sexual, other kinds of excitement and alcoholic excesses, fatigue, and the peculiar proneness to urethritis which is found in many cases. Gonorrhoea is, of course, also generated "de novo," as the result of promiscuous intercourse and filthiness. The exciting cause is the diplococcus of Neisser.

Diagnosis—The incubation period of gonorrhoeal urethritis is from three to five days. The diagnosis of gonorrhoea is made absolute when you obtain the Neisser organism. The doctor described the morphological and cultural characteristics of the gonococcus.

*Abstract of paper read before the Barry County Medical Society Dec. 13, 1903.

CHANCROID—Etiology—Its cause at the present time can scarcely be doubted. The micro-organism, as described by Unna and others, can be found in every case. Morphological characteristics were then given.

Diagnosis—1. Patient may be repeatedly inoculated with the virus of chancroid.

2. The bacillus of Unna is present in the secretion.

3. Incubation period is one to three days.

4. The appearance of the lesion:

- (a) Has a more or less stamped-out formation.
- (b) Edges irregular.
- (c) Covered with yellowish pus.
- (d) Base is generally not indurated.
- (e) Usually multiple.

5. Auto-inoculable.

6. Never followed by systemic disturbance.

7. Bubo—common.

SYPHILIS—Etiology—It is readily transmitted from one individual to another by contact. The specific germ has not been as yet established.

Diagnosis—1. Incubation period is from 10 to 30 days.

2. The appearance of lesion:

- (a) Usually but a slight erosion, situated on an indurated base.
- (b) More often single.
- (c) Gives off clear, serous fluid.

3. Adenitis—not liable to suppurate.

4. Followed by constitutional symptoms which the doctor enumerated.

MANIFESTATIONS OF VENEREAL DISEASE IN EYE, NOSE AND THROAT.

C. H. Baker, Bay City—Most cases of gonorrhœal infection of the eye occur in the newborn infant. The disease is eminently preventable by dropping a one-per-cent solution of silver nitrate into the eyes at birth. I believe every obstetrician ought to adopt this as a part of the routine management of his obstetrical cases. With proper care, most patients, seen before corneal involvement occurs, will recover without impairment of vision. If the cornea is abraded, however, great damage or total loss of sight is probable. Gonorrhœa in adults is vastly more dangerous to vision than it is in the infant. In most of the cases of adult gonorrhœa the eyesight is lost.

In regard to syphilis, the doctor believes that a person once a syphilitic is always a syphilitic. He reports a number of cases of syphilis of eye, nose and throat. His conclusions are as follows:

1. I wish to emphasize the need of impressing patients with the necessity of long-continued, faithful treatment in first bringing their disease under control, and frankness in informing the attendant of the old disorder in cases of outbreak of an obscure disorder later.

2. Nothing but heroic treatment should be tried with a case presenting symptoms of syphilis years after a supposed cure had taken place.

3. Place no dependence on the patient's denial of syphilis when symptoms point strongly to that disease, but put the matter at once to the test of mercury and iodine.

THE EFFECTS OF VENEREAL DISEASES ON INDIVIDUAL AND NATION.

W. L. Bishop, Bay City—Two classes of patients are seen by me:

1. Those who only desired (a) Relief from painful symptoms, and (b) reduction of discharge sufficient so that it will not soil their clothing.

These after marriage infect their wives with Neisser's disease. Dr. Bishop then mentioned the various gonorrhœal infections found in women.

2. Those who place themselves in your hands desiring to be entirely cured who are willing to do as you tell them. When are these patients cured?

(a) Examination for shreds in two glass urine test.

(b) Stripping the seminal vesicles for accumulations which are examined for gonococci.

(c) Introduction along the entire urethral canal of silver nitrate solutions (grs. v to water $\frac{1}{2}$). This will produce a discharge which is examined for gonococci.

If these (a, b and c) are negative, the patient is considered cured of gonorrhœa.

ATTEMPTS AND BEST METHODS TO REMEDY THESE DISASTROUS EFFECTS.

J. W. Hauxhurst, West Bay City.

MORTON GALLAGHER, Sec'y.

CASS COUNTY.

Cass County Medical Society met at Cassopolis December 31st and elected the following officers for 1904:

President—H. H. Phillips, Cassopolis.

Vice-President—J. H. Jones, Dowagiac.

Secretary-Treasurer—J. Baird, Dowagiac.

JAMES BAIRD,
Secretary.

CHEBOYGAN COUNTY.

The Cheboygan County Medical Society held its annual meeting at Cheboygan, January 5th. Three-fourths of the membership were present. The following were elected officers for 1904:

President, W. F. Reed.

Vice-President, W. G. Sellars.

Secretary and Treasurer, C. B. Tweedale.

The Society will hold its annual banquet at the New Cheboygan in February.

Four have been added to the membership during the year, the fee bill revised and new by-laws adopted.

C. B. TWEEDALE, Sec'y.

DELTA COUNTY.

The Delta County Medical Society held its annual meeting at Escanaba Dec. 16th.

This society has a membership of 23 out of a possible 29 in the county, and bright prospects for more.

Our guests were Theo. Fitch, of Ishpeming, Councilor for this district, and F. McD. Harkin, Lecturer. Papers were read by A. F. Snyder on "Typhoid Fever Twenty Years Ago," and Geo. Bjorkman on "The Relation of Hypnotism to Pelvic Diseases." Dr. Harkin gave a report of some interesting cases.

The election of officers was held, followed by a banquet.

The result of the election was as follows:

President—A. F. Snyder, Escanaba.

Vice-President—Geo. Bjorkman, Gladstone.

Secretary—H. W. Long, Escanaba.

Treasurer—Wm. Elliott, Escanaba.

Delegate—O. E. Youngquist, Escanaba.

The society will continue to hold monthly meetings, and has promises of a bright future.

H. W. LONG, Secretary.

GRAND TRAVERSE COUNTY.

SOME POINTS IN THE EARLY DIAGNOSIS OF PHTHISIS.*

A. E. CHASE, TRAVERSE CITY.

The importance of an early diagnosis of tuberculosis in whatever part of the body it may be found appeals to us all, especially when we consider that 50% of mankind are susceptible to tuberculosis, while but 14%

die from such infection. Thus phthisis is curable either spontaneously or under proper and early treatment. As a means of early diagnosis, Koch's tuberculin has proved impracticable in most cases. Serum agglutinating tests are so far a failure. One is therefore thrown back on physical signs and the finding of the bacilli. The beginning lesions of pulmonary tuberculosis are very difficult and at times impossible to make out. They develop in the apices of one or both lungs; starting as a small focus, and when there is a fairly thick layer of normal lung over it, the percussion gives no dullness. Among the early signs of pulmonary tuberculosis are weakened breath sounds, jerky or interrupted breathing, often associated with a loud vesicular murmur on the opposite side. Then, too, as a result of consolidation the expiratory murmur is prolonged to equal that of the inspiratory murmur. On inspection and palpation of the chest, I have several times noticed a lessened or tardy expansion of the chest, even when I could not be sure of a heightened respiratory murmur at the opposite apex. In order to detect mild degrees of dullness in the apices of the upper lobes, light percussion should be made over the supra-clavicular and supra-spinous fossæ. Heart sounds easily conducted to the apices, generally accompany a loss of resonance in the lung, due to consolidations or tubercular foci.

Sudden or occasional periods of hemoptysis in an otherwise apparently healthy patient, especially with a family history of tuberculosis should at once make us suspicious as to the probable presence of a tubercular lesion. Disturbed temperature equilibrium, ranging from 99° to 101°, extending over a period of 2 to 4 weeks with or without cough, and with some pain in the chest, with general malaise and loss of appetite, should put us upon our guard and make a very strong link in the chain of symptoms for the diagnosis of phthisis.

Not in every case of a clinical picture of phthisis are we able to find tubercle bacilli in the sputum, even after repeated examinations, but that doesn't prove that they are not there. On the other hand, you may have a patient come to you with a well nourished body, a well formed chest and the picture of health from all physical appearances, and you are surprised to find the tubercle germ in his sputum. When you find them it is proof positive of his condition and you need examine

*Abstract of paper read before the Grand Traverse County Medical Society.

him further only to determine, if possible, the extent of the lesion.

In every case of a doubted chronic lung disease, I think it would be wise to make an examination of the sputum. If the germ is found, it proves the condition beyond question and if it is not, it still leaves the question open for further developments.

GRATIOT COUNTY.

Gratiot County Medical Society held its annual meeting at Alma Sanitarium, Alma, Mich., Nov. 12, 1903. The following officers were elected:

President, I. N. Brainerd, Alma.
Vice-President, I. N. Montfort, Ithaca.
Secretary-Treasurer, G. S. Browning, Alma.
G. S. BROWNING, Sec'y.

HOUGHTON COUNTY.

The Houghton Medical Society met in Houghton, Dec. 7th.

PROGRAM.

M. M. Kerr read a paper on "Katatonia following Diphtheria." He stated that the pathology of katatonia was similar to that of general paralysis. The arachnoid was always involved. The duration of katatonia was from two weeks to three years. These cases can be treated at home with the aid of a trained nurse just as well as in an asylum. The treatment consists in isolation, trional in 15-grain doses for restlessness, a diet of milk, egg-nog, cereals, etc.

George M. Reese presented a paper on "Puerperal Eclampsia." It occurs once in about 260 cases. The most frequent time of occurrence is between seven and eight months; next at full term as the labor begins, after labor. Its exact cause is unknown. Almost every organ in the body has been held responsible for its occurrence. The usual excretion is diminished and the metabolism is not complete. In regard to treatment no nitrogenous food should be given. In plethoric patients with a very full pulse you may bleed and inject normal saline solution.

DISCUSSION.

J. E. Scallon said he obtained good results in prophylactic treatment, with an absolute milk diet.

C. H. Rodi's experience has been that more cases develop before than after labor, though

the latter are more fatal. The amount of albumin does not indicate the severity of the case. Elimination and milk diet is the prophylactic treatment.

J. McRae has seen eight to nine cases in 18 years of practice.

P. D. McNaughton had a case in a primipara at term. The treatment was chloroform with rapid delivery.

S. S. Lee believes some cases of eclampsia occur where no albumin is found in the urine. Elimination is the treatment.

A. A. Davis reported that all the cases which had occurred in the Calumet & Hecla Hospital showed albumin in urine. It is our danger signal.

A. I. Lawbaugh does not believe in bleeding the patient. In an attack, employ chloroform, morphia and deliver.

Jas. Hosking—If we can keep the kidneys secreting a good amount of urine, we are not liable to have trouble.

A. B. Simonson—Out of 96,000 cases of obstetrics, there were 463 cases of eclampsia. Of these latter 81 died, and of these 81, only 28 showed disease of the kidneys.

W. K. West reported a case when the first symptom was a convulsion. He delivered and on the third day the patient died of pulmonary oedema.

JAMES HOSKING, Sec'y.

Houghton County Medical Society held a meeting in Hancock, Jan. 4th.

R. J. Maas presented a paper entitled "A Foreign Body in the Urethra." The most varied substances have been from time to time introduced into the urethra by sexual perverts. The foreign body I wish to report this evening is that of a piece of gold-plated watch chain $3\frac{3}{4}$ inches long, introduced in 1889. It did not cause any great annoyance until August, 1895, when I first saw him professionally. He gave a history of feverishness, chilly sensations, loss of appetite, furred tongue, diarrhoea, headache, etc., which had troubled him for the past four weeks. His temperature was 100° F. As there was present at that time an epidemic of typhoid fever, I concluded I had a walking case of typhoid to deal with. I ordered the patient to bed and made several subsequent visits. During one of my calls he drew my attention to a bubo in right groin. He denied ever having gonorrhoea or sexual

intercourse. As there was no discharge from meatus, I thought it a complication of typhoid. By rest in bed and hot applications, the bubo had about disappeared at my last visit. He later told me that some few weeks later, the bubo discharged pus for a few days. In August, 1896, he called at my office on account of an acute orchitis. There was no history of injury, so I again accused him of having intercourse. He said, no, he could not have intercourse on account of pain and hemorrhage on erection. On examining the penis I felt something hard in urethria. He then confessed that he had introduced eight years ago a gold-plated chain. He said he had introduced part of the chain, but could not withdraw it and so cut it off near the glans penis with a hammer and chisel. He could always pass urine but in a small stream. On looking into the meatus, I could see a link of the chain. I tried to dislodge it with a tenaculum but could not. I then made an incision into urethra about one inch from meatus, and after cutting through the granulations, succeeded in removing the foreign substance. I am fully convinced that the chain was the cause of the supposed typhoid, bubo and orchitis, that the reason of its causing no disturbance for so many years was on account of the gold plate, which, as you now see, has been gradually dissolved, probably by the acid urine. When the urine began to act on the brass the trouble of which he complained during the past years 1895-1896 began.

A. I. Lawbaugh read a very practical paper on "Diagnosis of Head Injuries." The paper was discussed by **J. E. Scallon** and **N. S. MacDonald**.

JAMES HOSKING, Sec'y.

INGHAM COUNTY.

The Ingham County Medical Society met in Lansing, Jan. 14th, 1904.

PROGRAM.

Election of Delegate to State Medical Society.

Reports of Cases.

Paper—"Some Prevalent Skin Diseases," F. A. Jones.

Discussion led by S. H. Culver.

Paper—"Complication in Typhoid Fever," F. N. Turner.

Discussion led by J. W. Hagadorn.

L. ANNA BALLARD,
Secretary.

ISABELLA COUNTY.

Isabella County Medical Society held an informal meeting at Shepherd last month in the offices of Dr. King. Dr. McMullen, of Cadillac, was with us, and we had a splendid social meeting.

There were sixteen present, the largest number we have yet got together.

Dr. King is a royal entertainer, and there was nothing lacking to make the evening a very enjoyable one. It accomplished a great deal toward promoting a better feeling among a number of those present.

C. M. BASKERVILLE,
Secretary.

JACKSON COUNTY.

Jackson County Medical Society held its annual meeting at Jackson, January 5th, 1904. There was a large attendance and it was one of the most successful meetings in the history of the society. The following officers were elected for the year 1904:

President, D. E. Robinson, Jackson.
Vice-President, C. D. Hubbard, Parma.
Secretary, R. Grace Hendrick, Jackson.
Treasurer, F. W. Rogers, Jackson.
Delegate, N. H. Williams, Jackson.
Alternate, J. C. Kugler, Jackson.

PROGRAM.

Reading of Minutes.

Admission of New Members.

Payment of Dues.

Election of Officers and Delegates.

President's Address—N. H. Williams, Jackson.

"Clinical Demonstration; Examination of Neurological Cases"—Wm. J. Herdman, Ann Arbor.

"Clinical Demonstration; Physical Examination of Thorax"—E. L. Shurly, Detroit.

Clinical Cases—By the members.

The banquet was held at 8 p. m. Toastmaster, Albert E. Bulson.

Music—Messrs. Skinner, Foote, Bennett and Scotford.

Loyalty—E. L. Shurly.

The Silver Lining—Victor C. Vaughan.

Music—Messrs. Skinner, Foote, Bennett and Scotford.

Opportunities—George C. Hafford.

Idealism—William J. Herdman.

Music—Messrs. Skinner, Foote, Bennett and Scotford.

The Point of View—Rev. Fenwick W. Fraser.

R. G. HENDRICK,
Secretary.

ANNUAL ADDRESS

ESTIMATION BY THE LAITY OF THE MEDICAL PROFESSION.

NATHAN H. WILLIAMS.

I have ventured to select as the subject for the annual address of the president of this society, a matter not often mentioned, and, in my opinion, too much neglected, namely, the way in which we can place ourselves in our true light before the public, in order that the medical profession may have the estimation and appreciation that is its just due. That such is not the case now, I think all candid men will agree, and as every man is solicitous of his own reputation and jealous of his own honor, so we, as members of this profession, in which we expect to live and die and to which we are giving all that is in us of energy and devotion, must realize that this devotion should not be lost, but that our calling should be estimated at something like its true value by our fellow men, should have a position in public opinion worthy of its merits.

Without hoping that he can present anything particularly new upon the subject, your president has thought of bringing to your minds a few things which have a bearing upon the popular estimation in which the profession is held and upon the way in which we, as individuals, may influence such estimation.

One way in which medical men are injuring themselves is in belittling the action of medicinal substances. It is frequently said by physicians, more often by surgeons, that the physician of the future will not use medicines; that it will be all surgery, hygiene, dietetics. This is easily said, but will it be all? The surgeon who performs a laparotomy with a brilliant result, thinking quite correctly, that he has done something that medicine could not do, blinded by the more or less meretricious glitter of what he has done, at once says, medicine is all a delusion, surgery is everything. He is calling a part the whole. The patient work that has been done by wise men in the past hundreds, yes, thousands of years, cannot be brushed aside in such a flippant way. The accumulation of the results of accurate scientific work in all the departments of knowledge is a part of the knowledge of the world and the facts regarding the action of medicine are as much a part of scientific knowledge as the theory of gravitation or action of light.

Who can hope that surgery will ever take the place, in relieving suffering and restoring health, of the salicylates, of quinine, of mercury, of opium? When, by putting into the blood of a patient, morphine to the extent of one part to half a million, we replace agony with comfort, are we victims of a delusion? When we use anti-toxin and save a little patient's life, are we following a will o' the wisp? Should not the wonder of it rather incite us to further research among the secrets of nature, that perchance other as great blessings may be had for the asking?

If it be true, as possibly it is, that nerve force is identical with electricity, that the action of medicines is but electrical energy acting, of course, under exact laws, if it be true that the anæsthetic action of chloroform consists in simply changing the conductivity of the nerve fibres by its solvent action upon the fat contained therein, if these and a hundred other equally wonderful things be true, is it not true that the field of therapeutics offers as great rewards to the searcher after knowledge as any other possibly can? When we look candidly upon these things, must we not say that he speaks hastily who says that medicine is passing, and is it not a mistake to express to the laity a lack of confidence in our armamentarium?

Probably the most deplorable feature of the whole matter comes from the failure, on the part of the public, to discriminate between the pretender and the qualified physician and between the honest man and the knave, for the most dangerous quacks are the educated ones.

Laws will help us some, but we cannot have a perfect medical practice law until the public is educated to the necessity of it. Hence it devolves upon the physician to do what he can in that direction, by making the more intelligent, at least, understand the relation in which we stand to them as physicians; that we are simply representative of the present state of medical knowledge; that we are bound to and are able to give them the benefit of what is known of medical science up to the present time; that no one can do more than that; that we stand in the same position as other skilled professions. The mechanical engineer gives his clients the benefit of the knowledge of mechanical engineering up to the present day and his clients are satisfied, but the art and science of medicine looks so mysterious to the laity and is so juggled by the unscrupulous, that we who are trying to do

a plain and simple duty are classed in the popular mind with them.

In time, how long, oh, how long we cannot know, the one in need of medical advice will go to the honest physician as his final authority, and will no more expect the wonderful, than the railroad president will expect his engineer to build a bridge in a night.

The idea that there are different schools of medicine, radically opposed to each other, has a strong hold upon the public mind and powerfully affects it, for they say, that if two so-called schools disagree, one must be wrong, and whom can we believe? That view is shallow and the conclusion the result of ignorance, but it is a condition that exists and we should so consider it. The way to remedy this evil is to stop contention, which does no good and makes a ridiculous spectacle before the public, and lessens its respect for the disputants. For myself, if a fellow worker in our benevolent art uses much smaller doses than I, I have no quarrel with him, and if he will say nothing about the blood-letting, salivation and purgation of the past, I will not remind him of the psoric miasm or the itch mite. To be serious, we have all been acting foolishly over a detail of practice, and though it can be set down to zeal, and so extenuated, it has injured us all in public opinion and we ought to know enough to stop it.

Another thing which powerfully affects us in the opinion of the public is the matter of expert testimony in the courts. I will not attempt any explanation of why this is so. We all know it and all regret it, but we do not always realize the very great importance of it, or how more and more notorious the evil is becoming.

Man is naturally a partisan, and, if opposed, is pugnacious, and such a mental attitude is fatal to a candid search after truth. Much could be done to remedy this if, realizing the danger of the situation, we assume when called upon by an attorney for an opinion, a judicial attitude, and assure the man of law that the physician is far above being anyone's expert.

I hope you will pardon me if I speak of so common a thing as money. Our method of keeping accounts and of rendering bills has, in this practical and business-like age, a great influence upon the opinion in which we are held by those with whom we have business dealings. Though we are men of science, we cannot avoid our financial responsibility. In

my opinion, the time has long passed when the doctor was looked upon as a somewhat eccentric individual, exhaling the mingled odors of the laboratory and so absorbed in the contemplation of the mysteries of his profession as to be neglectful of material things, careless alike of dress and money. That doctor has passed. The doctor of the present should keep his accounts accurately and, as he is expected by everyone to meet his bills in a business-like way and is shown no favor because of his profession, so there is no other proper way for him, than to hold everyone to as strict an account for what is due him.

Charity is another matter, and a man may do as much of that as he likes, but it should not be confused with business. This is a business age, and if we take our stand squarely upon the value of our services, the public will respect us the more. If we are careless in our accounts, uncertain of what is due us and timid in exacting a proper remuneration, it will respect us the less.

Thus far of the individual. The old parable of the bundle of sticks which were strong enough when bound together to resist all effort to break them, but which were easily broken when separated, points us the moral that if we will maintain our organization in societies as developed in the natural evolution of progress, we will be stronger in the community and more likely to take the place which belongs to us in society.

Loyalty to our societies, county, state and national is among our first duties. Especially is this true of our county societies. In sustaining them we sustain all, for the county society is the unit, just as the town meeting is the unit of our national government.

If we would have our profession respected, we must respect it ourselves, by never speaking of it lightly, slightly or in a deprecatory manner. In that way we may take a lesson from the clergyman, who never speaks lightly of his work or tolerates any flippant remarks, derogatory of his profession. This laxity is very common among medical men, and, in a way, is the result of our knowing how little certainty there is in our limited knowledge of things in all departments of learning. We know that the light of our reasoning often fails to penetrate the fog which inaccurate premises will throw around the object of investigation; that despite all the boasting of the day, so far as science goes, we are living in a primitive age; that the life

of one man is so short that he can do but little; that nature is chary of her secrets; that men must give up their pleasure and ease, yes, even life, to find them; that disappointment is oftener the result than fruition and that from our mental limitations we often mistake the part for the whole. No one knows this better than the physician, for was it not the father of medicine who said "Life is short, art is long, opportunity fleeting, appearances deceptive, judgment difficult."

Hence the medical man is modest and not given to the positive statements of the tyro. Hence the unthinking often find some excuse for flippant remarks. Such should not be tolerated by ourselves, but in each of us should be personified the dignity of our noble profession.

KALAMAZOO COUNTY.

The Kalamazoo County Medical Society held its annual meeting Dec. 8th, 1903, at Kalamazoo. Owing to the change of the date of the annual meeting from April to December and that the present officers had acted only six months, the society decided to retain its present officers for the coming year.

President—A. H. Rockwell, Kalamazoo.

First Vice-President—F. S. Collier, Vicksburg.

Second Vice-President—F. J. Welch, Kalamazoo.

Secretary and Treasurer—O. H. Clark, Kalamazoo.

The following papers were listened to with much interest and elicited very much valuable discussion:

C. H. McKain, Vicksburg: "Tumors of the Brain," with report of case.

Discussion opened by A. W. Stone.

Angus McLean, Detroit: "Congenital Dislocation of the Hip."

Discussion opened by J. W. Bosman and F. J. Welch.

Richard R. Smith, Grand Rapids: "Treatment of Early Abortion."

Discussion opened by Della P. Pierce.

O. H. CLARK,
Secretary.

LAPEER COUNTY.

Lapeer County Medical Society met at Lapeer January 13th, 1904.

PROGRAM.

"Relations of the Nervous System to Some Diseases of the Intestines"—Mortimer Willson, Port Huron, Councilor for 7th District.

"Peritonitis"—H. E. Randall.

"Hydro-Therapeutics"—W. J. Kay.

"Translations from Italian"—J. S. Caulkins.

"Psychology of Neurasthenia"—Geo. D. Butler, Lecturer General Medicine.

H. E. RANDALL,
Secretary.

MENOMINEE COUNTY.

The annual meeting of the Menominee County Medical Society was held at Menominee, Dec. 8th, 1903, with an attendance of twenty, including members and guests.

The meeting was called to order by President Phillips, who delivered an informal address, pointing out some of the benefits of the society that were already apparent. He emphasized the fact that every physician but one in the city of Menominee is an active member and congratulated the society upon the harmony and cordial feeling that prevail among the profession in the community.

The secretary's report showed that eight meetings have been held during the year, with an average attendance of ten, the total membership being twelve.

An excellent paper on "Insanity and the Insane" was read by E. Grignon, Judge of Probate for Menominee County. After a brief historic review of insanity, he outlined the causes, prognosis and treatment of the various forms of insanity.

C. R. Elwood, in the discussion, dwelt upon the value of having a physician as probate judge. In cases of insanity, good histories are of the greatest importance, but unless the probate judge is a medical man these are not obtained and transmitted to the asylums. Then, too, the ordinary probate judge is very easily deceived by the patients.

C. O. Thienhaus, of Milwaukee, presented a paper on "The Technic and Advantages of Vaginal Operations in Cases of Retroflexions of the Uterus."

ABSTRACT OF THIS PAPER.

The fact that a number of operations have been devised and are being practiced for the relief of retroflexions of the uterus is evi-

dence that we have as yet no method that is satisfactory for all cases. Generally vaginal suspension is preferable to ventral suspension. It leaves the uterus in the small pelvis where it belongs. It is efficient, is attended with but little shock and when properly made does not complicate subsequent pregnancy. We get a suspension when serous surfaces are approximated, fixation when uterus becomes attached to the deeper structures. A number of cases are recorded in which Cæsarian section had to be resorted to following fixation of the uterus. Suspension is the proper method. In pregnancy enlargement of uterus is from the fundus, and if this be left free the natural development of the uterus and subsequent delivery will not be interfered with.

A unanimous vote of thanks was extended to Dr. Thienhaus for his valuable paper.

A telegram from Henry B. Favill, of Chicago, who was to have addressed the society, was read, stating that he had been recalled while on his way to Menominee by the serious illness of his son.

Officers for the ensuing year were elected as follows:

President—J. F. Hicks, Menominee.

Vice-President—R. G. Marriner, Menominee.

Secretary and Treasurer—P. J. Noer, Menominee.

Member of Board of Directors—R. A. Walker, Menominee.

Delegate to State Medical Society—E. Sawbridge, Stephenson. Alternate—H. A. Venema, Menominee.

After adjournment of the meeting the members of the Menominee County and the Marinette County Medical Societies and their wives were royally entertained at a dinner given by Doctor and Mrs. B. T. Phillips, at their beautiful home on Main street.

Following the repast, toasts were heartily responded to in speeches, stories and songs. This was the first time in the history of the Menominee River when the physicians and their wives all met together, and the hope was freely expressed that similar occasions would become more frequent in the future.

P. J. NOER, Secretary.

MIDLAND COUNTY.

At the regular meeting, held January, 1904, the following officers were elected:

President, F. A. Towsley, Midland.

Vice-President, F. H. Johnson, Midland.

Secretary-Treasurer, W. H. Brock, Midland.

Delegate, I. A. Towsley, Midland.

Alternate, W. H. Brock, Midland.

W. H. Brock, Sec'y.

OSCEOLA COUNTY.

The annual meeting of the Osceola County Medical Society was held at Reed City, Friday evening, Nov. 20th. The following papers were read:

"Ulceration and Cancer of Stomach," by W. T. Dodge, Big Rapids; "Examination of Sputum for Tubercle Bacilli," by A. A. Spoor, Big Rapids.

The following officers were elected for ensuing year:

President, H. L. Foster.

Vice-President, G. T. Fields.

Secretary and Treasurer, T. F. Bray.

Delegate to State Society, H. L. Foster.

Alternate, A. Holm.

Three new members were added and one lost by the death of Ernest W. Spinney.

After the meeting, a banquet was given to the members by Messrs. Mulholland and Strong, of Reed City.

THOS. F. BRAY, Sec'y.

SANILAC COUNTY.

Sanilac County Medical Society held its second annual meeting at Croswell, January 4th, 1904.

PROGRAM.

"Some Clinical Reports of Injuries and Their Effects on the Mind and Nervous System"—Samuel Bell, Detroit.

Discussion opened by R. G. Healy, M. D., Minden City.

"A Flap from the Fascia Lata in the Radical Cure of Inguinal Hernia"—Hal. C. Wyman, Detroit.

Discussion opened by H. McCrae, Marlette.

"Hysteria"—T. S. Kingston, Croswell.

Discussion opened by H. H. Learmont, Croswell.

"Why Should the Law Exact a Higher Degree of Skill from a City Physician than from His Country Brother?"—D. C. O'Brien, Lexington.

Discussion opened by John E. Campbell, Brown City.

"The Medical Profession"—J. W. Scott, Sanilac Centre.

Discussion opened by E. Meyer, M. D., Carsonville.

Annual address by the President, H. W. Smith, Carsonville.

G. S. TWEEDIE,
Secretary.

SHIAWASSEE COUNTY.

The annual meeting of Shiawassee County Medical Society was held December, 1903. The following officers were elected:

President, C. McCormick, Owosso.
Vice-President, T. N. Youmans, Bancroft.
Secretary-Treasurer—Chas. Shickle, Owosso.
Board of Directors—L. M. Cudworth, Perry;
J. N. Eldred, Chesaning; J. J. Howard, Byron.
V. C. Vaughan of Ann Arbor delivered an address on the early diagnosis and treatment of tuberculosis.

CHAS. SHICKLE, Sec'y.

TUSCOLA COUNTY.

Tuscola County Medical Society held its annual meeting at Vassar, Jan. 11th, 1904.

BUSINESS MEETING.

Report of Officers and Delegate.
Address of President—A. L. Seeley.
Address of Councilor—S. I. Small.

PAPERS.

"The Physician's Duty to Pregnant Women"—Geo. Bates.
"The Conduct of Normal Labor"—A. J. Howell.
"The Care of Puerperal Women"—C. W. Clark.
"The Treatment of Valvular Heart Lesion"—T. W. Hammond.

The doctors' wives were entertained in the afternoon by Mrs. F. D. LeValley.

W. C. GARVIN,
Secretary.

WASHTENAW COUNTY.

The Washtenaw County Medical Society held its December meeting on the second Wednesday evening of the month.

The paper of the occasion was read by John P. Sawyer, of Cleveland, Ohio, Professor of Medicine in the Western Reserve University, who discussed "The Clinical Relations of Stomach Disorders to Diabetes." The essayist presented an exhaustive dissertation and

cited a number of cases to prove the relationship. The paper was discussed by Doctors Dock, Vaughan and Cowie.

Doctor Sawyer made a few concluding remarks.

Doctor Cushny reported the finding of aniline dye in a specimen of urine, which was traced to certain patent pills that are advertised as female regulators.

The membership of the society was augmented by the election of fourteen applicants.

A vote of thanks was extended to Doctor Sawyer for his able paper.

The next meeting will be held on the second Wednesday evening in March, at which time delegates to the State Society will be chosen.

J. W. KEATING,
Secretary.

WAYNE COUNTY.

General meeting, December 3, 1903. **I. E. Polozker** read a paper entitled "Medico-Legal Post-Mortems." The definitions and objects of official necropsies were reviewed, and the ideal examination contrasted with the examination as held in Wayne County. It is impossible to do good work in Detroit, because of the lack of facilities, and the interference of the police and the newspaper men. The writer then vigorously attacked the method of selecting the detectives, and deprecated the manner of obtaining expert testimony. He recommended that the Wayne County Society should start a movement to influence legislation in favor of (1) an improvement in the manner of taking expert testimony; (2) the abolition of the coroner's court, and (3) the building of a suitable morgue. Post-mortem examinations should be a part of the curriculum of every medical school.

Wm. P. Lane, of the Detroit bar, opened the discussion, followed by **David Inglis**, **D. E. Hills**, **O. W. Owen** and **E. L. Shurly**.

On motion the society referred the recommendations made by Dr. Polozker to the committee on legislation.

D. L. Walmsley gave a history of his own case, under the title, "A Living Pathological Specimen."

General meeting, December 10, 1903.

This was given up to a symposium on milk.

C. L. Stewart presented the first paper on "Milk Inspection." The work of the milk inspectors covers (1) the examination of the

milk itself, and (2) the investigation of the milk supply. Two 6-ounce samples of the milk are taken in sterilized bottles, one of which is given to the producer, and the other taken to the laboratory for examination. These samples are taken from the farms, from the cans during transportation, from the milk depots, from the stores, and from the wagons on the street. The milk being handled so many times, the chances for contamination are great.

The sources are carefully inspected, attention being given to barns, employees, drainage, fodder of the cows, health of the cows, the method of aeration, the manner of cleaning the cans, etc.

The essayist condemned the stables in and near the city, where the cows are crowded together and no chance is given for the proper exercise of the animals. The good work the system has accomplished is evidenced by the decrease in the number of samples showing less than the required 3% of butter fat. There have also been few samples adulterated with formalin, boric acid, and borax.

Guy L. Kiefer's paper, "Standards of Milk Supply in Detroit and Other Cities," and **George Duffield's** paper, "Milk in Its Pathological Relations," appear among the original articles in this issue of the Journal.

Meeting December 17, 1903.

SYMPOSIUM ON PNEUMONIA.

The president, **C. G. Jennings**, in introducing the subject, spoke of the prevalence of the disease in the great centers of population. The mortality of tuberculosis, typhoid fever, scarlet fever, smallpox and diphtheria combined is but little greater than that of pneumonia alone.

Bar air and unhygienic living are factors in the etiology. Age has little influence, but the disease is more prevalent among males than among females. Cases are most frequent during the winter and spring months, some authorities holding that the great changes in temperature and humidity enhance the virulence of the pneumococcus.

While pneumonia is more fatal among alcoholics, statistics seem to show that they are not more prone to the infection. Other infectious diseases leave a soil favorable to the development of the pneumococcus, and previous attacks enhance susceptibility. The great predisposing factor is exposure to cold.

That pneumonia is a disease directly com-

municable every physician has had ample evidence.

The discussion of the evening should be confined to acute lobar pneumonia, by which we understand a disease produced by the entrance of the pneumococcus into the air cells of the lung and the development of its toxins in the cells and tissues. The lung has two sets of blood vessels, but only the functional set is important. If it is possible to combat any disease by bacterioidal remedies introduced into the blood, pneumonia would seem to offer the best opportunity, for a large percentage of the blood passes directly through the diseased organ.

Joseph Sill read a paper on the "Bacteriology of Pneumonia."

Bacteriologically, as well as clinically, there are, broadly speaking and leaving out of account cases of tubercular origin, two types of pneumonia—the lobar or croupous, and the lobular or broncho-pneumonias.

The one is a specific infectious disease, caused by a single micro-organism; the other has a varied bacteriology, and is frequently secondary to, or a complication of, some other infectious disease.

Croupous pneumonia, that type of the disease characterized by a sudden onset with a chill, by lobar involvement, rusty sputum, high temperature and defervescence by crisis, is due to an organism of the streptococcus group, known by several names, as Frankel's pneumococcus, the micrococcus of croupous pneumonia, or the diplococcus lanceolatus. The credit for the discovery of this micro-organism probably belongs to George M. Sternberg, formerly Surgeon-General of the United States Army, who isolated the pneumococcus from the blood of animals inoculated with his own sputum, in 1880. It is a micrococcus triangular or lance shaped, occurring typically in pairs, and when isolated from the animal body, surrounded by a capsule. When grown artificially in the laboratory, this capsule is wanting. Its ordinary habitat is in the secretions and on the mucous surfaces of the animal body, especially those of the upper air tract. It does not find favorable conditions of growth away from the living host, and laboratory cultures rapidly die out.

Just what conditions are necessary to permit it to penetrate to the smaller bronchi and the alveoli, are not well understood, for it is often present in healthy throats, and is frequently found alone or in company with other

organisms in anginas, and it can often be demonstrated in cultures taken from the throats of those suffering with true diphtheria.

Like diphtheria, pneumonia is essentially a local disease, the diplococci being rarely demonstrable in the blood, although a true pneumococcus septicemia is not unknown. All the manifestations of the disease cannot, however, be explained by the local action of the bacteria. In addition to causing a fibrinous inflammation involving one or more lobes of the lung, the pneumococci elaborate a toxin, which, absorbed and circulating in the blood, produces the systemic symptoms of the disease.

Although clinical observation shows that an attack of pneumonia offers no protection against subsequent attacks, but on the contrary, seems to predispose to a second infection, pneumonia is no exception to the rule that an attack of an infectious disease confers an immunity of longer or shorter duration against the infection from which the patient has recovered. In pneumonia this immunity is very ephemeral, disappearing sometimes in the course of a few days, but there is evidence that goes to show that for a short time at least, immunity to the disease does exist. An animal can be protected against inoculation with the pneumococcus by injections of the blood serum of a patient suffering with the disease. The occurrence of crisis seems to be a manifestation of immunity, for, while the systemic symptoms disappear with rapidity at this time, there is no corresponding change in the anatomic condition of the lungs, for although defervescence may occur in twenty-four hours, resolution of the diseased lung tissue is a much more gradual process. Crisis is then to be explained, not by any sudden change in the local condition, but on the ground that the presence of the toxin of the pneumococcus in the body fluids causes the production of substances capable of neutralizing the toxin, and as soon as these substances are produced in sufficient quantity to neutralize all the poison elaborated by the bacteria, the systemic symptoms disappear, and this immunity persists at any rate long enough for the diseased lungs to return to their normal condition.

Pneumococcus pneumonia is ordinarily a primary infection. It may, however, be secondary to a tonsillitis or angina due to the pneumococcus, and the bacteria may reach the lungs by way of the blood stream, although the usual path of infection is through the respiratory passages.

F. W. Mann, in speaking of the complications, said that these may be divided into two groups, (1) those coming from the patient, and (2) those due to an extension of the infectious process. Among those of the first group are the results of the use of alcohol, pregnancy and scoliosis. Among those of the second group are pleurisy, empyema, endocarditis, thrombosis and embolism, meningitis, and croupous colitis.

E. L. Shurly spoke of the treatment. There are three indications as follows: (1) Treatment directed to a neutralization of the elaborated toxins; (2) treatment directed to a limitation of the infectious process; and (3) treatment directed to the support of the respiratory, circulatory, and central nervous systems.

As yet there is no specific medication, but the recent advances which have been made along the lines of serum therapy seem to offer bright prospects for the future.

The fever should be regarded as a normal reaction and high temperatures should not be combated by the coal tar products, veratrum viride, or aconite, as these depress the heart and the central nervous system. Such remedies as have a selective action on the glandular tissues may be used to hasten the absorption of the exudate. Calomel and the biniodide of mercury will thus act.

Therapy is most valuable along the line of stimulation, the character of the pulse being the guide. Alcohol is the most valuable stimulant. Strychnine, digitalis, nitroglycerine and the nitrites, though of value, are much abused, as there is risk of tiring out the nerve centers. The speaker's experience with oxygen has been disappointing. Ammonium carbonate is a good diffusible stimulant. The use of opium in certain cases is to be recommended. Bathing has a decidedly beneficial effect upon the heart and the nervous system.

The papers were discussed by **Drs. Flinterman, Delos Parker, Thaddeus Walker, Lau, Fay, Siegel and Appelbe.**

Surgical section, Dec. 7, 1903.

Hal. C. Wyman read a paper on "Bone Abscess of the leg." This affection may be acute or chronic, more frequently the latter. It is characterized by swelling and pain in leg and knee, the pain being like that of inflammatory rheumatism, but differentiated from it by the persistent localization. The bone is painful on percussion and throbs when the leg is moved. On palpation, the

sharp edge about the head of the tibia becomes flattened, and there is a fusiform swelling to be made out.

The treatment is with the chisel and gauge, until the anterior wall of the bone abscess is removed. The cavity thus exposed is scraped, and the infected surface destroyed with the curette and chemicals. The periosteum should first be elevated, and flaps saved to turn down and line the exposed surface. Dead bone and sequestrum are the exception.

Constitutional treatment embraces change of food and fresh air. Cases do especially well if the patients are placed in the fresh air to sleep.

Tubercle bacilli have been found in some of the cases.

A number of cases, with histories covering from six weeks to six years, were reported.

Medical section, December 14, 1903.

W. M. Harvey read a paper on "Acute Gastritis," and **D. M. Cowie**, of Ann Arbor, one on "Achyilia Gastrica."

Section on gynecology and obstetrics, December 21, 1903.

Ellen B. Everitt, of Philadelphia, presented a paper on "Dysmenorrhœa and Allied Manifestations."

PUBLICATION COMMITTEE.

GONORRHOEA.

Historical Resume.—It is a disease of great antiquity. Both Hippocrates and Celsus have mentioned it in their writings. Keyes, in 1903, edition on Genito-Urinary Diseases, writes that a most respectable antiquity is given to gonorrhœa by the fifteenth chapter of Leviticus, although it is contended that the discharge known to the Jewish law-giver was a simple urethritis. Gonorrhœa was accurately described by many writers of the middle ages. The early observers considered it a disease of the secretory apparatus with a flow of semen from external urethral orifice. Hence came the name of gonorrhœa—flow of semen.

Toward the end of the fifteenth century syphilis appeared throughout Europe. As this disease and gonorrhœa occurred often together, the former was thought to be the constitutional

sequelæ of the latter. John Hunter, in 1767, believing in the non-identity of the two diseases, inoculated himself with pus from a patient who was suffering with acute gonorrhœa. Unfortunately this patient also had unrecognized syphilis and Hunter caught both diseases. In 1793 Benjamin Bell published an exhaustive article on non-identity of the tripper and the great pox.

During the years 1831-1837 Ricord inoculated many people and proved syphilis and gonorrhœa to be distinct diseases.

Hugh H. Young, of Baltimore, has gotten up a list which sets forth the chronological advance of our knowledge and the names attached to each new step as seen below. (*Jour. of Cutaneous and Genito-urinary Diseases*, June, 1900.)

Although Neisser announced his discovery of the gonococcus over 20 years ago, it has only been during the last few years that evidence has been forthcoming to prove its peculiar and widespread powers of pyogenic injection. The chain of evidence is now practically complete:

In 1879 Neisser (*Centralbl. f. d. Med. Wissensch., Berl.*, Bd., 28, 1879) demonstrated that this coccus was the cause of ophthalmia neonatorum, but it was not until 1887 that it was successfully cultivated by Bumm. (*Der. Mikroorganismus der Gonorrhœischen Schleimhaut Erkrankungen.* "Gonokokkus Neiser"). Since then it has been shown by pure cultures that the gonococcus may be the sole cause of various ascending and metastatic infections, viz.:

Arthritis, first demonstrated in pure culture by Lindemann, 1892 (*Beitr. z. Augenh., Hamb. u. Leip.*, 1892, p. 31).

Tendosynovitis, by Tollemer and Macaigne, 1893 (*Rev. de Med.*, Paris, Nov. 1893, p. 990).

Perichondritis, by Finger, Ghon, and Schlagenhauser, 1894 (*Arch. f. Dermat. u. Syph., Wien.*, 1894., Bd., 28, p. 330).

Abscess, subcutaneous, by Lang and Paltauf, 1893 (*Arch. f. Dermat. u. Syph., Wien.*, 1893, Bd., 25, p. 330).

Abscess, intramuscular, by Bujivid, 1895 (*Arch. f. Dermat. u. Syph., Wien.*, Bd., 38).

Salpingitis, by Wertheim, 1882 (*Arch. f. Gynäk., Berl.*, Bd., 42, p. 1).

Circumscribed pelvic peritonitis, by Wertheim, 1892 (same article as the above).

Adenitis (gland of neck) by Pettit and Pichevin, 1896 (*J. d. Mal. Cutan. et Syph.*, Paris, 1896, p. 419).

Pleurisy, by Mazza, 1894.

Endocarditis, by Thayer and Blumer, 1895 (*Arch. d. Med. exper. et d'anat. path. Par.*, Nov., 1895).

Septicemia, by Thayer and Blummer, 1895 (same article as the above).

Acute Cystitis, by Wertheim, 1895 (*Ztschr. f. Geburtsh. u. Gynäk.*, Stuttg., 1896, No. 35).

Chronic Cystitis, by Hugh H. Young, 1900 (*J. f. Cut and Genito-Urinary Diseases*, June, 1900.)

Pyonephrosis, by Hugh H. Young, 1900 (same article as the above).

Diffuse Peritonitis, by Hugh H. Young, 1900 (same article as the above).

MORTALITY OF MICHIGAN DURING DECEMBER, 1903.

There were 2,942 deaths returned to the Department of State for the month of December, or 319 more than reported for the previous month. The death rate was 14.1 per 1,000 population, as compared with 12.9 for November.

There were 490 deaths of infants under 1 year, 191 deaths of children, aged 1 to 4 years, and 944 deaths of elderly persons over 65 years of age.

Important causes of death were as follows: Tuberculosis of the lungs, 158; other forms of tuberculosis, 33; typhoid fever, 48; diphtheria and croup, 96; scarlet fever, 17; measles, 16; whooping cough, 23; pneumonia, 376; influenza, 49; cancer, 151; accidents and violence, 182.

There was a decrease in the number of deaths reported from typhoid fever, and the usual seasonal increase in deaths reported from pneumonia and influenza. There were no deaths from smallpox during the month. One death from chickenpox was reported from Highland township, Osceola county.

CHANGE IN MEMBERSHIP.

(Dec. 15th to Jan. 15th.)

NEW MEMBERS.

H. V. Abbott, Shepherd, Mich.
J. C. Abbott, Winn, Mich.

W. W. Arscott, Alpena, Mich.
W. G. Bayley, Carlton Center, Mich.
H. Bayer, Cooperville, Mich.
D. E. Bennings, Schoolcraft, Mich.
P. C. Bourdeau, Grand Rapids, Mich.
Dr. Brailly, Freeport, Mich.
W. A. Burham, Trimountain, Mich.
A. M. Campbell, Grand Rapids, Mich.
E. O. Cilley, Conklin, Mich.
R. P. Comfort, Nashville, Mich.
H. R. Conklin, Tecumseh, Mich.
Ray Connor, 91 Lafayette Ave., Detroit, Mich.
J. A. DeVore, Grand Rapids, Mich.
J. V. Dooling, St. Johns, Mich.
R. R. Eaton, Lowell, Mich.
E. Elliott, Chesaning, Mich.
C. P. Felshaw, Holly, Mich.
F. B. Fisk, North Adams, Mich.
J. Fletcher, Kalamazoo, Mich.
C. B. Fulkerson, Kalamazoo, Mich.
A. Grigg, Saginaw, Mich.
H. W. Hammond, Luther, Mich.
C. B. Hernam, Grand Rapids, Mich.
A. Holm, Ashton, Mich.
H. D. Hull, Tecumseh, Mich.
F. Huntly, Reed City, Mich.
M. Y. Hyde, Prairieville, Mich.
T. C. Irwin, Grand Rapids, Mich.
G. K. Johnson, Grand Rapids, Mich.
O. A. La Crone, Kalamazoo, Mich.
C. W. Logan, Paris, Mich.
M. B. McCausland, Covert, Mich.
E. McCoy, Grand Rapids, Mich.
C. S. McIntyre, Woodland, Mich.
A. A. McKay, Coleman, Mich.
R. J. McMeekin, Saginaw, Mich.
A. Magill, Midland, Mich.
E. L. Martin, Maple Rapids, Mich.
W. S. Morden, Macon, Mich.
J. Mulhern, Grand Rapids, Mich.
T. B. O'Keefe, Grand Rapids, Mich.
H. Palmer, St. Johns, Mich.
Willis Parr, Metz, Mich.
A. Roche, Kearsarge Mine, Mich.
J. A. Rowley, Durand, Mich.
W. H. Scott, Kalamazoo, Mich.
I. S. Townsend, 850 Cass Ave., Detroit, Mich.
O. Whitney, Jasper, Mich.
W. D. Whitten, Hancock, Mich.

CHANGE OF ADDRESS.

C. Braidwood, Dryden, Mich.
 W. C. Brown, 1241 Gratiot Ave., Detroit, Mich.
 E. N. Dundass, Los Angeles, Cal.
 J. O. Dutrizae, Sturgeon Falls, Ont.
 W. J. Kirkbride, Fountain, Mich.
 T. B. Scott, Owosso, Mich.
 A. Striemer, Hillsdale, Mich.
 W. H. Witter, Battle Creek, Mich.

LEFT THE STATE.

A. M. Bettys, Oxford, Mich.
 T. Greiner, Sault Ste. Marie, Mich.
 J. E. Hinkson, Wacousta, Mich.

DEAD.

E. W. Spinney, Reed City, Mich.

Book Notices.

NOSE AND THROAT WORK FOR THE GENERAL PRACTITIONER. By George L. Richards. Published by International Journal of Surgery Co., N. Y. Price, \$2.00.

This little book of 330 pages is just what it pretends to be, a guide for general practitioners and students. The author does not attempt to give all that is known and thought on the subject, but gives in a clear and concise way, only such points as he thinks helpful in everyday practice. The bulk of the work is taken up with the things most commonly met with and only little time given to the rarer conditions. One may not always agree with the methods he advocates, but they are those he has found most useful in his own experience and are practical. The illustrations are rather more numerous than usual and for the most part clear.

DISEASE OF THE PANCREAS, ITS CAUSE AND NATURE. Eugene L. Opie, M.D. Cloth. pp. 359. J. B. Lippincott Company. Philadelphia, Pa. 1903.

It is seldom one has the pleasure of reviewing so complete and scholarly a book as the one before us. The etiology of pancreatic disease has long been shrouded in mystery. This is partly due on the one hand to the rarity of the disease and partly to the difficulty with which it can be recognized. This work considers chiefly those

conditions peculiar to the organ and those whose etiology is characteristic. The first three chapters are given over to a very excellent and thorough description of the gross and minute anatomy of the pancreas. Those points which bear on the pathology and are not fully given in the ordinary text book receive the chief attention, especially the interacinar islands which play such an important rôle in the physiology as well as the pathology of the gland. The anomalies which render acute pancreatitis such a rare disease are fully described.

Acute disease of the pancreas is taken up fully and the rôle gall stones play in its etiology well proven. It is certainly clear that some, if not all, cases of acute hæmorrhagic pancreatitis are due to the lodging of a small calculus in the common duct, permitting a flow of bile up through the pancreatic duct and so into the pancreas. Fat necrosis, its significance and cause are given a full chapter.

The varieties of chronic interstitial pancreatitis are clearly described, beginning with the congenital syphilitic pancreatitis. Then the two main groups of the disease in adults are discussed, (a) interlobular pancreatitis in which the islands of Langerhans are not involved until late in the disease and (b) interacinar pancreatitis in which the islands suffer early and in common with the acini. The causes of these forms are given as far as they are known and the different pictures they present are well contrasted.

Hyaline degeneration of the pancreas and the relation of this organ to diabetes mellitus makes one of the most interesting features of the book. The epoch-making discoveries of von Mering and Minkowski who showed the control which the pancreas exerts over the carbohydrate metabolism are given. Hæmochromatosis is studied in detail because it illustrates the relation of diabetes mellitus to a form of pancreatitis whose etiology can be explained. In conclusion, such symptoms and treatment as have been developed by this study are brought together and the line of progress pointed out. An excellent bibliography is appended.

The book as a whole reflects great credit on our American scholarship. Anatomy, pathology, physiology, the latest researches of others and the author's own experimental work are all brought together to advance our knowledge in this chosen field. It appeals most strongly to those for whom medicine is a living, breathing science and not a musty collection of facts.

Progress of Medical Science.

MEDICINE.

Under the charge of

HARRISON D. JENKS.

The Dwarf Tapeworm (*Hymenolepis Nana*). C. W. Stiles believes in spite of the assertion of American text books that the armed tapeworm, *tænia solium*, is the common one found in the United States, that the unarmed worm, *tænia saginata*, the parasite got from eating beef, is most frequently found. These two, with the broad Russian tapeworm, a form practically unknown in this country, are large worms. He has reason to believe that the dwarf tapeworm, varying in size from an eighth inch to two inches in length, is common in the United States, but has so far largely escaped observation. It was first found in this country in 1873 and again in 1902, but since then, because looked for, in a considerable number of instances. This worm has its early life in rats and mice. From the visits of the infected rodent to pantries and other food receptacles the food becomes infected. Such infection would necessarily occur chiefly in houses of poor construction and so among the poorer classes. It has also been found among inmates of institutions such as poor houses, asylums, orphan homes, etc.

It resides in the ileum and there may be several thousand in a single individual. Although so small, it can apparently produce as marked symptoms as the larger worms. A diagnosis is made by finding the minute worm or segments of it, or else by finding the eggs under the microscope. The latter method is the simpler for one familiar with the appearance of the eggs. Male fern is probably the only effective drug for its cure. Prevention by keeping the food away from infected rodents or by isolating infected patients is more desirable.—(*New York Medical Journal*, Nov. 7, 1903.)

Haw Scarlet Fever is Transmitted.—Aaser, after treating 3,800 cases of scarlet fever and noting the source of infection, found that 79 were infected from patients who had been discharged from the hospital, apparently free of the disease. The patients were kept nine weeks in the institution and carefully disinfected before their discharge. Desquamation was all finished at least a week before discharge. He therefore concludes that the skin was not the source of infection in these 79 cases. He thinks they were infected from the throats, noses or ears of those who went out. He believes scarlet fever is contagious much longer than is generally supposed. He says: "The poison can apparently remain for a considerable length of time in the nose, throat, or ear. Through the secretion from these mucous membranes the poison is further distributed. In this secretion, then, lies the danger of infection. As long as there is an abnormal secretion the patient must remain isolated, even if the period be twice as long as is ordinarily regarded as necessary, and the patient with scarlet fever should never be discharged until the physician has convinced himself by careful examination of the throat and nose

that the secretion has ceased.—(*Nord. Med. Archiv.*, 1903, *Abt. II.*, *Anhang 51*.)

Chronic Polyarthritis and Tuberculosis.—Edsall and Lavenson have made a study of 18 cases of polyarthritis, partly arthritis deformans and partly so-called chronic rheumatism, with reference to the tuberculin reaction. Classification of chronic polyarthritis by different authors is rather confusing, but by using the distinctions formulated by Pribram they have arrived at a pretty definite disease. On 18 of such cases they have used the tuberculin reaction. Tuberculosis, as ordinarily seen, is rather different from the phenomena of chronic polyarthritis. Yet the frequent presence of pulmonary tuberculosis, the tubercular family history and the symptoms accompanying tuberculosis are frequently associated with chronic polyarthritis, and the difference between ordinary joint tuberculosis and the polyarthritis is no greater than between so-called scrofulous glands and lymphatic tuberculosis simulating pseudoleukæmia. Poncet, Barjon, Berard, and several other French observers have noted the possibility of such cases being tuberculosis. In fact, Poncet is convinced of the fact that many are tubercular. Edsall and Lavenson report that from their experiments there is at least weighty circumstantial evidence in its favor. If tuberculosis should prove a factor of importance in the etiology of chronic polyarthritis, it will be in the group commonly called chronic rheumatism. Yet even some of the active cases of arthritis deformans with febrile exacerbations may also be tubercular. Should some of these joint inflammations prove to be of a peculiar type of tuberculosis, it will distinctly help to clear up the confusing etiology of these obscure lesions.—(*American Journal Medical Sciences*, December, 1903.)

Splenic anaemia (Banti's Disease)—Banti has described a condition where there is an enlarged spleen and anaemia, associated later with ascites and chronic interstitial hepatitis. Dock and Warthin believe such a symptom-complex should be called splenic anaemia. They have made an exhaustive study of two cases of this disease, one of which seems to have been in the early stages with early cirrhotic changes, and the other in a more advanced stage with marked fibrosis of the liver. Both of these cases had stenosis and calcification of the portal vein. An interesting point is whether the splenic fibrosis is primary to the stenosis of the portal vein or secondary to it; in other words, is the splenic enlargement a distinct disease, or is it simply secondary to liver trouble? The anaemia seems to be secondary to the splenic trouble. They seem rather to incline to the idea that splenic anaemia is a group of pathological conditions in which even the splenic condition is secondary; that the whole subject needs more study to determine the relationship of the different changes as they arise.—(*American Journal Medical Sciences*, January, 1904.)

SURGERY.

Under the Charge of

MAX BALLIN.

The Importance of Traumatic Defects in the Skull.—The first duty of the surgeon, called upon to treat an open compound fracture of the skull, is to provide for an aseptic condition of the wound and to prevent pressure on the brain by control of hemorrhage, removal of all loose pieces of bone, elevation of depressed parts, etc. If, after such removal of loose pieces of bone, a defect in the bony skull remains, the question arises shall we leave this hole open or closed? This question has been answered differently by different observers. Kocher thinks that such a hole in the skull would act as permanent "safety-ventil" against increase of the intracranial pressure and prevent post-traumatic epilepsy. Horsley believes that it does not matter whether a small hole is left in the skull or not. Von Bergman holds that defects in the bony skull may give rise to epilepsy and reports four cases in support of his theory. To decide this important question Bunge has made inquiries as to the condition of 13 cases of compound fracture of the skull which were discharged from the Koenigsberg clinic with defects in the skull. Of these 13 cases, 10 showed disturbances due to the defect, as vertigo, headache and epilepsy. These disturbances arose often several years after the defect had developed. On the other hand inquiry concerning five cases, where the traumatic defect had been primarily covered by plastic operation, showed that none of these cases had any disturbances. Secondary plastic closure of a defect in three cases resulted once in a cure of epilepsy. These statistics indicate that every traumatic defect in the skull should be closed primarily, that is as soon as aseptic condition of the wound is established. As the best method for this closure Bunge recommends the reimplantation of the fragments. These are cleansed, cut into small pieces (the pieces of the vitrea being preferable), put on the dura mater. Such a reimplantation is usually successful. Otherwise plastic closure of the defect by a skin-periosteal bone flap or better still by a subaponeurotic flap including periosteum and some bone is indicated. Once in Bunge's cases the implantation of a boiled piece of bone taken from the skull of a corpse was successful. The author does not believe in heteroplastic procedures as the implantation of celluloid, hard rubber-celluloid, hard-rubber plates, etc. (Bunge, *Mitteilungen aus den Grenzgebieten der Medizin und Chirurgie*, Vol. 12.)

Anomalies in the Circle of Willis.—The blood-supply of the brain comes from the carotid and vertebral arteries. Both of these arterial systems communicate with each other and with the arteries of the other side through the arterial circle of Willis. This anastomosis has always been considered a main factor to provide an equal, undisturbed blood supply to

the brain. Anomalies of this circle of Willis have been described several times, but have been considered mainly as anatomical curiosities. The following case observed at the Boston City Hospital shows that such an anomaly in the arterial circle in case of ligation of the carotid artery may be of fatal consequence. A man, 35 years of age, was operated upon for a lymphosarcoma of the neck. The tumor was adherent to the left common carotid artery and its removal necessitated ligation and resection of this artery. Right after the ligation the patient showed serious symptoms of cerebral disturbance, which continued until death occurred 24 hours after operation. The autopsy showed that the ligation of the carotid and a defect in the circle of Willis had cut off the blood supply to the left hemisphere of the brain. There was a degeneration of the posterior communicating arteries to impermeable threads, and an entire absence of the anterior communicating branches. This anomaly prevented collateral circulation to the left side of the brain after ligation of the carotid and was therefore the immediate cause of the œdema and softening of the left hemisphere as found in the post mortem. (Walter C. Howe, *Annals of Surgery*, Dec., 1903.)

Hemorrhoids in Children are comparatively rare, but there can be no doubt that they occur at an early age. Allingham, Matthews, Trinska have reported such cases. The latter collected thirty-nine of them, in children below the age of 15; of these, five were under one year old. (Matthews, *Diseases of the Rectum*.)

Reinbach reports four new cases from the clinic of Mikulicz; one of them, 7 weeks old, one 3½ years, one 8 years, and one 14 years of age. The author (Reinbach) used the specimen of one of these cases, consisting of the whole pile-bearing mucous membrane, which was excised after the method of Whitehead. Sections of this specimen showed clearly that hemorrhoids are not, as is commonly thought, dilated veins or varicose veins, but are true angiomata with new formation of blood vessels or cavernous spaces in a connective tissue stroma. Reinbach holds that all hemorrhoids should be considered tumors and should be distinguished from the real varicose dilation of the hemorrhoidal veins, such as are found in pregnancy.

Most piles do not show dilated veins, but show new formations of blood vessels or of cavernous tissue. The practical conclusion that Reinbach draws from this pathological finding is, that piles should be removed by excision, the best method being that of Whitehead, and not by cauterization and ligatures, for, if piles are true angiomata the latter methods will often be followed by relapses, as every practitioner has observed. (*Mitteilungen aus dem Grenzgebieten der Medizin und Chirurgie*, Vol. 12, Parts II and III.)

GYNECOLOGY AND OBSTETRICS.

Under the charge of

B. R. SCHENCK.

Genital Tuberculosis. The most comprehensive research on the subject of tuberculosis of the female genital organs and peritoneum, which has yet been made, is contained in the report of Veit, presented at the Rome Congress last year. The translation of Noble is now available. Veit collected a large series of cases from various sources and after a careful study arrived at the following conclusions:

Tuberculous infections are more frequent than has been generally supposed.

It may be either primary or secondary, the former being rare.

It may be transmitted by the blood or the lymph stream, and is usually a descending infection.

When primary and circumscribed, operation is advised.

When secondary, with a tuberculous focus elsewhere, the treatment should be general. Locally, iodoform is the best palliative agent.

Peritoneal tuberculosis is always secondary. It may heal spontaneously, and, when not cured by laparotomy, there are tuberculous foci elsewhere. (*Noble, Amer. Gyn., Sept., 1903.*)

Antistreptococcus Serum. In view of the fact that such varying reports as to the value of antistreptococcus serum in puerperal sepsis, are being published both in this country and abroad, a recent investigation by Meyer is of interest. There are four different sera: (1) Marmorek's, produced from one variety of organism, made artificially virulent; (2) Deny's, made from artificially virulent organisms of several varieties; (3) Tavel's, made from unchanged organisms of different varieties; (4) Moser's, produced from one unchanged organism. After experimenting with all of these the author concludes that the only effectual one in protecting mice and rabbits is Marmorek's. This protection seems to be due to its power of diminishing the virulence of the bacteria, which are subsequently destroyed by the cells of the body. (*Zeitsch. f. klin. Med., Bd. L., p. 145.*)

Post-operative Femoral Thrombosis. Secord's case of thrombosis of the left femoral veins followed an operation for double inguinal hernia in a woman aged 35. Bassini's operation was done on both sides at the same etherization. The dissection on the right side was the more difficult, there being consequently more injury to the tissues and more extravasation.

The wounds were dressed on the 10th day. They healed per primam, and there was no redness about them. The convalescence was normal, with a temperature below 100 and a pulse below 90, until the 12th day, when there were shooting pains in the left groin, popliteal space, and calf of the leg. On the 14th day, the saphenous vein became palpable and on the 15th the temperature rose to 101, remaining there for nearly a week. The pulse was correspondingly increased in frequency, but did not show an acceleration previous to the rise in temperature, as observed by Singer in phlegmasia alba dolens. There was some cedema in Scarpa's triangle, but none at the ankle.

The various views as to the etiology of this condition are discussed and 69 cases from the literature are tabulated. Of these, 64 per cent. followed the removal of abdominal tumors. Secord calls attention to the probability that a change in the blood pressure is a causative factor. In the author's case a truss had been worn on the left side for two years, and on account of the restlessness of the patient, the bandages became loose and did not exert the accustomed pressure on the parts.

Secord's conclusions are:

(1) No single etiological factor is responsible.

(2) The rôle of infection does not seem to be an important one.

(3) Conditions of sudden decrease of pressure, dependent upon the operation, probably exert a causative influence.

(4) Treatment should be prophylactic. Traumatism and hemorrhage should be avoided and sudden decrease in tension guarded against by having the wound area well supported by well-fitting bandages.

(5) There has been no mortality in the reported cases, but the occurrence of pulmonary embolism in a certain number warns us that this termination is not an impossible one.—(*Amer. Gyn., Oct., 1903.*)

Coeliotomy in Tuberculous Peritonitis. Zesas reports two cases of peritoneal tuberculosis, which have remained well nine and five and a half years respectively, after laparotomy. The patients are both girls, 15 and 20 years of age. After a study of 69 recent articles, the author advocates early operation in this disease, as he believes that spontaneous cure rarely occurs.—(*Centralbl. f. Gyn., VII. No. 11.*)

The Advertiser

INSTRUCTIVE ADVERTISING.—Advertising is an art. This is an advertising age. We are all interested, more or less, in the methods employed. Some advertisers literally force themselves upon us, as our waste baskets testify; some placard our street cars with doggerel rhymes, albeit at times clever and amusing; some mar our scenery with hideous signboards and others use various distasteful methods. These we classify under annoying advertisers, because we can not get away from them, try though we may.

But there is another class of advertisers who use the monthly journals and magazines, to which we may turn at our leisure. Yes! We do turn to them, for who has not spent many enjoyable quarter-hours glancing through the advertising pages of the latest magazine or medical journal? In the latter we find many instructive advertisements. Some represent the best efforts of the engravers and printers, thereby appealing to our æsthetic temperaments. Some of them are of educational value, as they call attention to the newer instruments and pharmaceutical preparations, about which we can not afford to remain ignorant. Among the latter, or instructive, advertisements, we would call your attention to the space used this month by the Detroit Clinical Laboratory.

Their advertisement gives us a clear description of obtaining blood for the Widal agglutination test, a test which every practitioner of internal medicine wishes to use occasionally, either to confirm a diagnosis or to help clear up some obscure fever. Of course, there are other methods of obtaining blood, but the advertisers set forth their method because they have had the best results with blood obtained in this manner. With the dried blood, accurate dilutions can not be made and the examination is robbed of the exactness which all scientific work should represent. Puncture with one nib of a new steel pen is advised. Experience has shown that many, thoughtlessly, use an ordinary sewing needle making a small round hole which rapidly closes up without allowing sufficient blood to exude, besides, giving more pain than the pen or a small lancet. A new pen is always procurable, it does not need sterilization and can be thrown away after use. Cabot says they have been used in thousands of blood examinations at the Massachusetts General Hospital, and no signs of sepsis have been seen in any case. This he says may possibly be accounted for in part by the fact that the next step in the process is always to wipe away four or five successive drops of blood as they emerge. This serves not only to get the blood flowing freely, but also to wash the ear in its own blood.

The lobe of the ear is recommended, for there is no question as to its superiority over the finger. The ear is less sensitive and a slight puncture gives us all the blood needed. The patient, if a timid woman or a child, can not watch the puncture or the preparations. A sleeping patient often must be aroused to get at his finger, while his ear is usually accessible.

In making the puncture, stretch the skin tight with the fingers of the left hand so that no "give" is possible and then use a very quick stroke, the hand rebounding like a piano hammer. What hurts the patient is mistaken tenderness on the part of the operator who presses the point slowly through the skin. The puncture must be deep enough to make the blood flow freely and without pressure, after it is once started by very slight squeezing. If the skin is moderately thin and the ear easily made hyperemic, a puncture one-eighth of an inch deep is sufficient. With thick, bloodless skin it may be necessary to go one-quarter or one-third of an inch—never more. Lastly, *beware of bleeders*. As a routine, always ask after a history of hemophilia, it may save you embarrassment in stopping a troublesome hemorrhage. If there is a history of hemophilia, a mere touch of the point will give all the blood required.

Trivial as the instructions of the advertisement may seem, we believe you can not but agree with us that such instructions are essential and should be implicitly followed by us, if we wish to get the best results from the laboratory worker. We hope the Detroit Clinical Laboratory will continue to give us instructions each issue on the proper preparation of material for examination.

PLEURISY—ANTIPHLOGISTINE.—Dr. B. was under my care last winter suffering from a pulmonary cavity. He had had previously two or three intercurrent attacks of pleurisy, which I again found present on Dec. 7th, 1902, accompanied by severe pain over the cavity, and a temperature of 103°. His previous attacks had occurred at his home, where careful poulticing was practicable, but in apartments this was unsatisfactory, and so it occurred to me to try Antiphlogistine.

The material was warmed and "trowelled" on for many inches around the pleuritic center, then covered with non-absorbent lint and Jaconet.

The result was remarkable; the pain disappeared within an hour, and the high temperature within two days.

Many advantages over poulticing were noticed by the patient; facility of application, no unendurable heat, rapid relief from pain, its adhesiveness rendered movement possible without tight bandaging or the alternative sudden influx of cold air which follows the separation of a poultice from the skin.

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CHILBLAINS—ANTIPHLOGISTINE.—Chilblains to many will appear a trifling matter, but as one whose school days in winter were rendered miserable by them, I can assert that they are most maddening. Last winter my daughter, aged 11, suffered from them severely. Each time Antiphlogistine was applied the redness and intolerable itching disappeared in a night. I have tried remedies innumerable with no such result. (Dr.

The Advertiser

Colin Campbell, Southport, Eng., L. C. R. P., M. C. R. S., writes in the *Medical Press and Circular*, London, Eng., Oct. 7, 1903.)

PRETTY CHRISTMAS PARTY TO EMPLOYEES.—One of the pleasantest events of the holiday season in the drug circles was a buffet luncheon given on last month by Fairchild Bros. & Foster to their employes. It was a complete surprise to the guests, who numbered about 140. A big table in the work room on the fourth floor at 74 Lighthouse street New York City, fairly groaned with all the good things prepared by Maresi's chefs, and was decorated with potted plants presented to members of the firm by the members of the office staff.

B. T. Fairchild welcomed the guests to the "Christmas party," as it was called, and E. W. Dusenberry responded, after which Messrs. S. W. Fairchild and M. G. Foster also spoke. There was music during and after the luncheon, which began at 12:30, and at three o'clock the annual presents in gold were distributed among the employes, and the rest of the day was declared a holiday.

IODOSYL.—One of the leading practitioners in Detroit who has been using iodosyl extensively in his genito-urinary work, remarks: "I have been using iodosyl as a dusting powder for the past year, in place of iodoform and all other powder dressings and have been much pleased with it. Have made no bacteriological experiments, but clinically, it has seemed to me a pleasant and valuable product. The gauze will take the place of iodoform, both as external dressing, as well as for packing cavities."

Somewhat recently the iodosyl pencils have been placed on the market. They contain besides iodosyl, zinc sulphocarbolate, mercuric oleate, alum, sodium borate, and morphine sulphate. The basis of the pencils is cocoa butter. The indications to be met in the treatment of gonorrhœal urethritis are: First, to destroy the microbe on which the infection depends; second, to subdue the local inflammation; third, to relieve the pain and irritation that are always present. These several indications, it will be seen at a glance, are met by the combination of remedies associated in the iodosyl pencils. Among the remedies, iodosyl has a unique action, in that the iodine it contains, is held in so stable a chemical combination that it has no irritant action, and yet, in presence of living tissues, it exerts a powerful alterative influence which can be explained only on the hypothesis that it is slowly set free in the nascent state.

ADRENALIN IN THE TREATMENT OF THE CARDIAC TOXEMIA OF PNEUMONIA.—The writer, Henry L. Elsner, M. D., of Syracuse, N. Y. (*New York Medical Journal*, Jan. 2, 1904), directs attention to the appalling mortality of pneumonia due to the resulting cardiac toxemia. The prime factor in this disease is a toxemia with obstruction in the pulmonary circuit, leading to cardiac asthenia. Marked

changes occur in the right half of the heart, with far-reaching degenerative changes in the muscle, heart-clots, and vasomotor paralysis.

Three remedies meet the indications presented by the circulatory changes due to paralysis of the vasomotor centers, the dilated condition of the arteries and the weakened heart. These are strychnine, digitalis and suprarenal extract or Adrenalin, its active principle. Adrenalin acts on the heart and blood vessels favorably; it does not act on the vasomotor center. Hence, it may be used to assist strychnine. When the vasomotor center is exhausted and blood pressure study proves the inefficiency of strychnine, Adrenalin may still be administered, and, in some cases which seem unpromising, when combined with the method of stimulation about to be suggested, we may carry the patient beyond the critical period to a safe recovery. Suprarenal extract, or Adrenalin, has seemed to the author to act as a needed food in all infections where there is danger of myocardial degeneration. He reports a case of pneumonia, in a woman, the mother of five children, in whom it had been impossible to raise a continually lowering blood pressure with strychnine. The systolic blood pressure was almost immediately raised by the repeated administration at short intervals of fifteen minims of a one to one thousand solution of Adrenalin hypodermically, and the patient was saved.

PNEUMONIA—ANTIPHLOGISTINE.—"Many a man is to-day worrying over a case or two of pneumonia, pleurisy, or capillary bronchitis, whose troubles would flit away like mist, did he but know enough to put his patient into a jacket of Antiphlogistine." (*Medical Summary*, Nov., 1902.)

ESKAY'S ALBUMINIZED FOOD IN MARAMUS.—"From birth our baby presented the worst case of maramus I ever saw, and after trying everything else I placed her upon Eskay's Albuminized Food. After the first week her thin, bony legs, arms and face with flabby skin hanging in loose folds around it, became more rounded and full. Her skin became natural in color; her weight increased almost daily and her expression is now satisfying and pleasing. Her whole appearance is at the present time, that of a nice, bright little baby with a laughing face, and there is no more moaning and painful indigestion and rapidly wasting away disease."

Dr. _____, New York.

PANOPEPTON IN PNEUMONIA.—Patient, a woman aged 62 years, in a weak and emaciated condition, unable to retain food of any kind; constant vomiting. Milk, lime water and beef teas had been used previous to Panopepton. Panopepton, in water, was administered, a tablespoonful every three hours, and was the sole food for one month. The patient made a good recovery, Panopepton being a food especially desirable in this case, as the patient had heart failure.